

AN ARCHAEOLOGICAL SURVEY OF VALLEY ROAD
FROM ROUTE 41 TO ROUTE 7,
HOCKESSIN VICINITY,
NEW CASTLE COUNTY, DELAWARE



by

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Newfield, New Jersey

Delaware Department of Transportation Archaeology Series No. 128

Eugene E. Abbott
Director of Planning

1994

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DELDOT PROJECT 78-021-25 DELDOT ARCHAEOLOGY SERIES NO. 128

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Submitted To

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Eugene E. Abbott
Director of Planning

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Abstract

An Identification and Evaluation Survey (a.k.a. Phase I/II Archaeological Survey) was undertaken in 1993 for the Delaware Department of Transportation (DELDOT). The project involved the investigation of areas to be affected by proposed improvements to Valley Road, between Route 7 and Route 41. A large portion of the project area was found to have been disturbed by previous construction. Phase I investigations -- including documentary research and fieldwork -- have been completed for the entire project alignment. Four locations were investigated at the Phase II level. These locations include 7NC-A-80 (the Springer House site [1852] and prehistoric site [ca. 1000 B.C.- A.D. 1000]), 7NC-A-81 (site of a late-19th/early 20th century stone barn and wingwall), 7NC-A-82 (the Thompson House site [late 19th century to present] and prehistoric site [ca. A.D. 1000]), and 7NC-A-3, Locus B (a prehistoric site [undated but possibly ca. 2000 B.C.], a portion of which had been previously reported). The latter three sites contain cultural remains that do not satisfy minimal requirements for significance as established by National Register Criteria for Evaluation. The grounds around the Springer House have been disturbed to an extent that militates against the survival of archaeological deposits *in situ*. Such artifacts as have been found on the grounds do not constitute a significant resource for want of good associations. However, an examination of the cellar and a crawl space beneath the Springer House indicates the possibility for the survival of artifacts or other remains relating to occupation during the mid-19th century. Accordingly, portions of the historic-era component of 7NC-A-80 are considered to have the potential to yield information about rural life in the region during the last century. The site is deemed to be potentially eligible for listing upon the National Register under Criteria (d). Unequivocal data respecting this potential could not be secured by testing during the course of the present study because the house was still occupied as a dwelling. Additional archaeological investigation of the indicated portions of the house is recommended, once the house is vacated, so that a definitive evaluation of significance with respect to National Register Criterion (d) can be obtained.

Table of Contents

List of Illustrations	iii
Introduction	1
Research Design	1
Research Methods	6
Geographic Setting	8
Paleo-Geography	10
Archaeology	20
Historical Summary	25
Survey Results	32
Considerations of Significance	52
Summary and Conclusions	54
References	56
Appendix I: Log of Test Units	60
Appendix II: Artifact Inventory	81

List of Illustrations

Text Figures

Figure 1: Project Location Map	2
Figure 2: Historical Map, 1893	3
Figure 3: General Test and Site Locations	4
Figure 4: Photograph Locator Map	11
Figure 5: Plan of Testing at 7NC-A-80	36
Figure 6: Plan of Testing at 7NC-A-81	45
Figure 7: Plan of Testing at 7NC-A-82	50
Figure 8: Plan of Testing at 7NC-A-3 (Locus B)	51

Photographs

Plate 1: General View of Valley Road	12
Plate 2: General View of Valley Road	13
Plate 3: General View of Valley Road	14
Plate 4: General View of Valley Road	15
Plate 5: Springer House	35
Plate 6: The Wingwall	39
Plate 7: Detail of Wingwall	40
Plate 8: Detail of Wingwall	41
Plate 9: Collapsed Barn Wall, Exposed in Cut	42
Plate 10: Detail of Collapsed Barn Wall	43
Plate 11: Artifacts from the Barn Site	44
Plate 12: Thompson House Site, Abandoned Farmall Tractor	47
Plate 13: Thompson House Site, Partially Exposed Foundation	48
Plate 14: Thompson House Site, Prehistoric Site	49

DeIDOT Archaeological Series Index Information

Report Title: AN ARCHAEOLOGICAL SURVEY OF VALLEY ROAD FROM ROUTE 41 TO
 ROUTE 7, HOCKESSIN VICINITY, NEW CASTLE COUNTY, DELAWARE

DeIDOT Report Number:

Level of Investigation: Phase I, II

Basic Time Periods Covered:

_____	All prehistoric
_____	Mainly prehistoric, some historic
_____	Equal coverage of prehistoric and historic
<u> X </u>	Mainly historic, some prehistoric
_____	All historic

Site Contexts:

	Prehistoric	Historic
Plow zone/disturbed surface soils	X	X
Intact features		
Buried artifact-bearing strata		

List up to five major time periods or site types

1. MID-LATE NINETEENTH & EARLY TWENTIETH CENTURY FARMS
2. WOODLAND I PREHISTORIC SITE

List up to eight major topics covered in Conclusions and Discussions of Results

1. ECONOMIC HISTORY OF HOCKESSIN AREA
2. NINETEENTH CENTURY FARMS
3. LATE NINETEENTH CENTURY BARN
4. LATE PREHISTORIC SITES - LIMITED REMAINS

Specialized Analyses Undertaken

Prehistoric

Historic

Blood Residue
Ceramic Chronology
Ceramic Vessel Surface Alterations
Cordage Twists from Ceramic Impressions
Faunal Analysis
Flake Attributes
Floral Analysis
Flotation
Geomorphology and Pedology
Glass Analysis
HABS Documentation
HAER Documentation
Historic Architecture
Informant Interviews
Leather Analysis
Miller Ceramic Index
Mortar Analysis
Palynology
Projectile Point Chronology
Projectile Point Function
Radiocarbon Dates
Soil Chemistry
Spatial Distribution of Artifacts
Stone Tool Functional Analysis
Wood Identification

X

List up to five other specialized analyses not listed above:

NONE

Geographic Area Covered

☒ New Castle County
☐ Kent County
☐ Sussex County
☐ All State

Introduction

This report summarizes the results of a Phase I/II Cultural Resource Survey undertaken in 1993 for the Delaware Department of Transportation (DelDOT). The overall project involved the investigation of areas to be affected by proposed improvements to Valley Road (C.R. 294) between Route 7 (Limestone Road) and Route 41 (Old Lancaster Pike). Proposed road improvements include upgrading the road along its present alignment by creating twelve-foot travel lanes, ten-foot shoulders, drainage features, and stormwater management areas.

The archaeological services were performed pursuant to the instructions and intents set forth by Section 101(b)(4) of the National Environmental Policy Act 1969; Section 1(3) and 2(b) of Executive Order 11593; Section 106 of the National Historic Preservation Act of 1966; 23 CFR 771, as amended October 30, 1980; 36 CFR 66; the guidelines developed by the Advisory Council on Historic Preservation, published November 26, 1980; and the amended Procedures for the Protection of Historic and Cultural Properties as set forth in 36 CFR Part 800 (October 1, 1986).

This report was written by R. Alan Mounier, based upon information gathered by himself and others. Ann R. Brown compiled information from historical sources and assisted with graphics. Fieldwork was conducted by John H. ("Jack") Cresson and Debra Campagnari Martin, directed and assisted by the author.

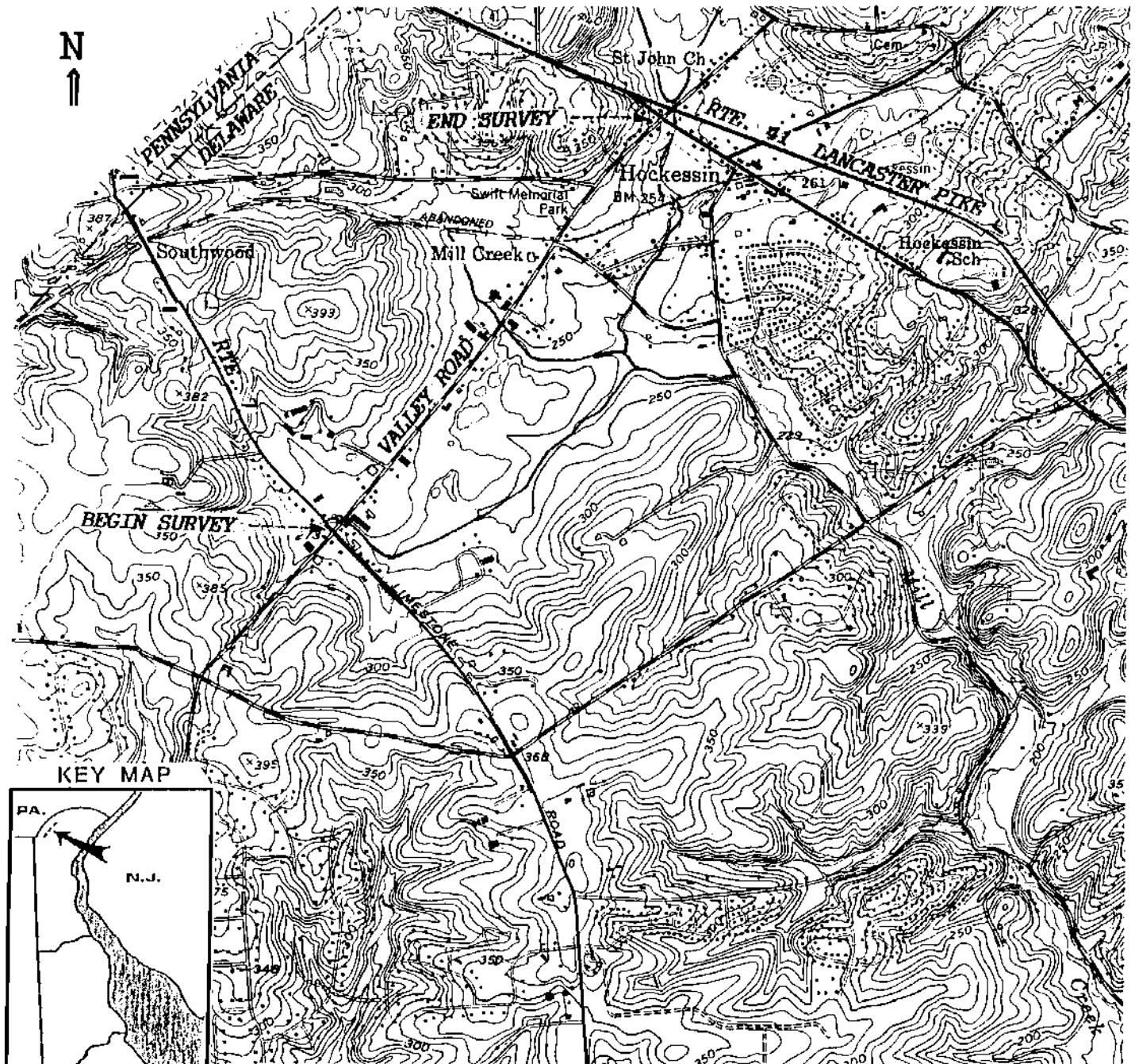
Research Design

The purpose of this investigation is to identify and evaluate any cultural remains that might reside along the project alignment. As a preliminary investigation, this study has no particular research objectives respecting anthropological theory. Rather, the objectives are principally practical, having

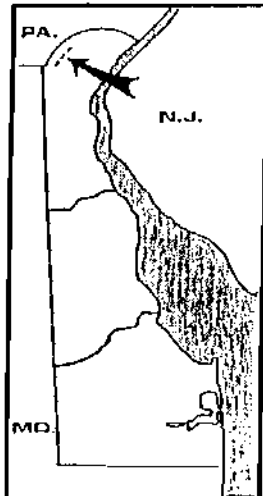
Figure 1: Location Map
U.S.G.S. Kennett Square, PA Quadrangle

Scale - 1:24000

2000 feet



KEY MAP



DELAWARE

From Baist, 1893

Scale - 1:38182

3000 feet



N
↑

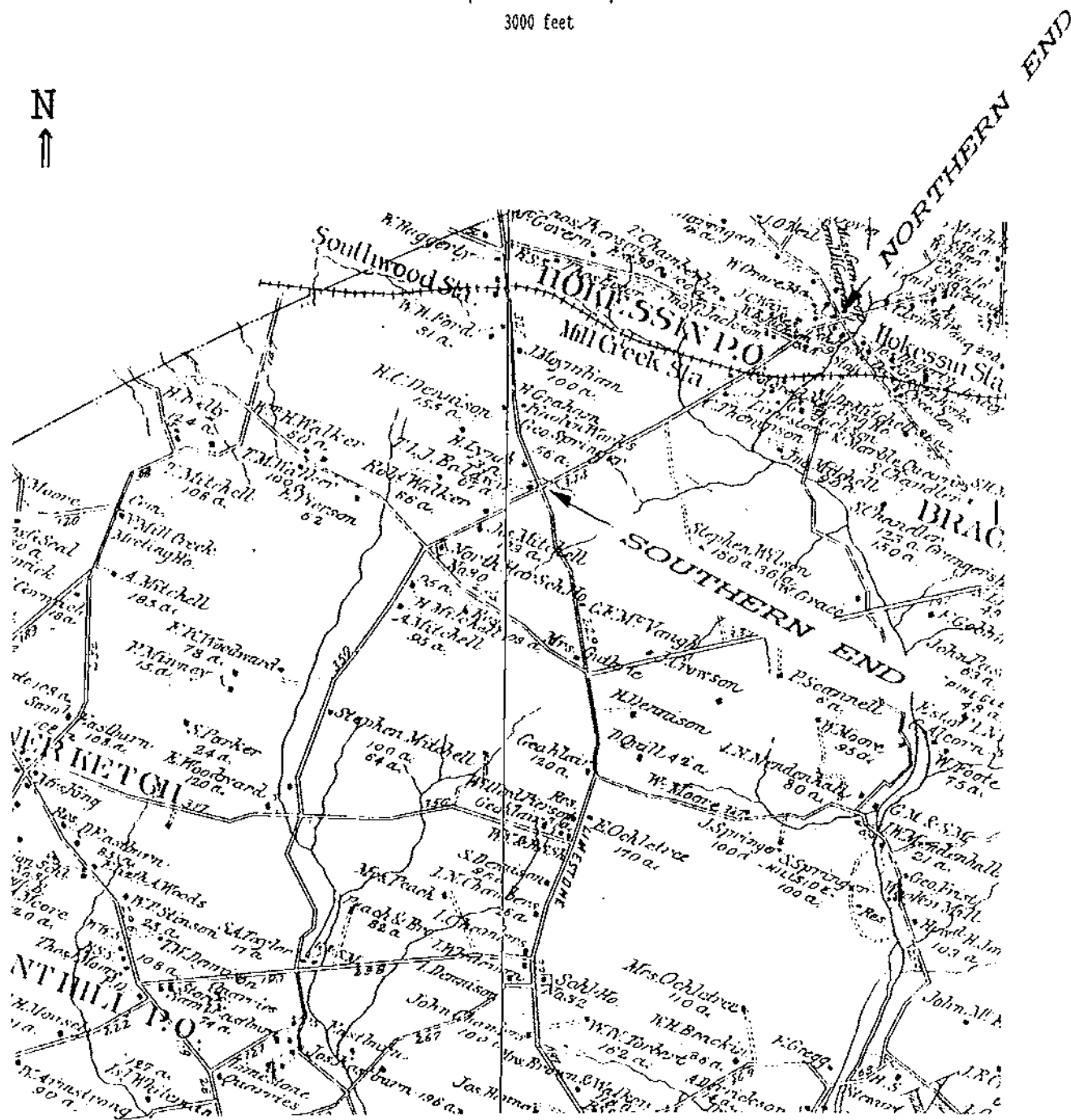
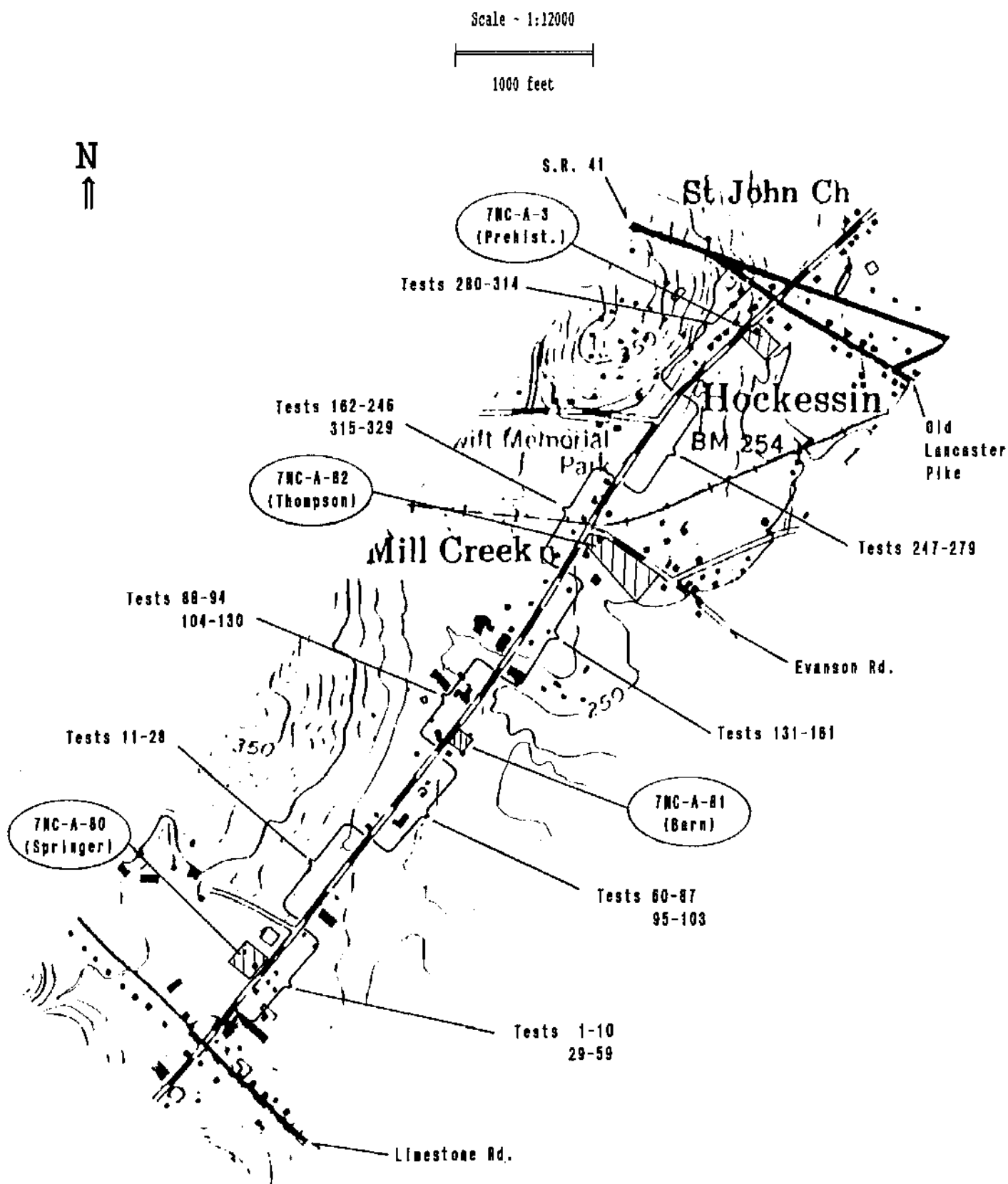


Figure 3: General Test and Site Locations



to do with the need to recognize cultural remains, if present, and to evaluate their significance so as to effectuate responsible management in the context of the current regulatory milieu.

The requirement for identification entails background research and fieldwork to determine the presence or absence of cultural remains. A prevailing sense of pragmatism compels the utilization of the most parsimonious research procedures consistent with the satisfaction of the stated survey objectives. The author recognizes that sites of human occupation vary in their composition and form with respect to their distribution in space, time, and culture. Given the expectation that evidence of human occupation is likely to occur unevenly across the landscape, the strategy for prospecting must suit the geographic configuration of the project location. The investigator generally favors the stratification of project locations -- especially those of substantial acreage -- into search zones on the basis of geomorphic considerations, particularly patterns of topography and drainage. As a rule, strict interval testing is avoided, except under conditions that might make such testing both productive and cost-effective. Usually, these conditions are satisfied only on project locations that are both limited in size and essentially planar in topography.

The investigative procedures and pertinent sources of information relating to the present study are described in more detail below (see Research Methods).

Upon detection of a cultural presence, the evaluation requirement necessitates differentiation between *cultural remains* and *cultural resources*. Whereas cultural remains comprise any physical vestiges of previous human behavior, cultural resources can be defined as those remains which have potential significance for science and/or for the appreciation of heritage. In this

context, significance will be measured in relation to the National Register Criteria for Evaluation (36 CFR Part 60.4).

Research Methods

Research procedures included documentary research, fieldwork, laboratory procedures, and reporting. Each of these tasks will be described below.

1) Documentary Research

Documentary research was undertaken to gather basic data with respect to the natural and cultural histories of the project area, using the National Register Eligibility Study completed by Kise Franks and Straw (Jan. 16, 1991) as a general guide. Sources of information minimally included the following: County and local historical societies; Morris Library; Bureau of Archaeology and Historic Preservation; County Clerk's Office; and other institutional sources as necessary. Persons knowledgeable about local archaeology and history were sought out and interviewed.

2) Fieldwork

Fieldwork was undertaken to inspect the locations of known sites and to examine areas in which no sites have been as yet reported. Fieldwork comprised a comprehensive pedestrian survey -- including visual examination of exposed ground surfaces, earth cuts, standing structures, and ruins -- and subsurface testing.

Subsurface testing was conducted at appropriate intervals with opposable posthole shovels. Excavation units were opened in areas where potentially

significant remains were found. Excavation Units measured $2\frac{1}{2}$ x 5 feet ($12\frac{1}{2}$ s.f.), and were excavated in arbitrary three-inch levels or by cultural stratum, if present.

The sampling scheme for the Phase I study provided for close interval testing (50-foot) of the entire impact area, due to the moderate to high probability of encountering both prehistoric and historic remains. The impact area was defined as that area between the current edge of pavement and "R/W" (Right-of-Way) or "TCE" (temporary construction easement) lines, as drawn on project plans (dated August 1992, and January 18, 1993). When both lines were present, the outermost boundary line was considered to be definitive.

Roadside survey was accomplished in a single transect of 50-foot interval tests where the width of the impact area was 50 feet or less; or, in two transects of 50-foot interval tests where the impact area was wider than 50 feet. Large areas, planned for drainage features, were tested at a rate of 17 tests per acre (50-foot intervals).

A number of tests were held in reserve to be used in areas determined, through documentary research, to be archaeologically sensitive. When appropriate, these tests were excavated in addition to the regular testing proposed. A total of 329 test units were opened (Appendix I).

The Phase II portion of the proposal assumed that a maximum of five sites would require investigation following the Phase I work. The proposal provided for 15 additional posthole shovel tests, and up to two five-foot square excavation units (or four $2\frac{1}{2}$ x 5 foot trenches) per site.

Excavated material was screened through No. 4 hardware cloth ($\frac{1}{4}$ " mesh). Cultural material was bagged appropriately by provenience and transported to the laboratory for processing.

Field data were recorded systematically at the time of observation, using a standardized record form. Measurements and estimates of size with respect to structures were recorded in English units. A photographic record was compiled.

3) Laboratory

All recovered materials deemed to have value in imputing significance to identified sites were cleaned and conserved as necessary. Processing and analysis of recovered remains followed current professional standards. Mundane, modern, and nondescript artifacts were culled from the assemblage without record.

Artifacts retained for analysis were packed in cardboard boxes, appropriately labelled as to provenience, and transmitted to a State repository for storage and future reference.

4) Reporting

Reporting follows established conventions for professional archaeological survey reports. The report of contains the following: introductory material; a description and rationale of research procedures; sources of information; an inventory and evaluation of cultural resources; and recommendations concerning the management of identified cultural resources.

Geographic Setting

Valley Road is located near Hockessin, within Mill Creek Hundred in northern New Castle County, Delaware. The northern portion of Delaware lies upon the Piedmont physiographic zone whose seaward boundary is located along the fall-line to the south, roughly parallel to Delaware Route 2, the Kirkwood Highway (DeCunzo, Catts, Grettler, Guerrant, and Fithian 1992:3). Further inland, the

Piedmont continues to rise in elevation until it becomes the Valley-and-Ridge system of the lower Allegheny Mountains.

The Piedmont is mostly hilly, with more gentle slopes near the fall line. Elevations range from about 100 to 400 feet above sea level. The geology consists of igneous and metamorphic rock. Most soils of the Piedmont are well-drained by way of stream drainages that flow eastward into the Delaware River (Matthews and Lavoie 1970:92).

However, along Valley Road the physiography differs from the general pattern in that approximately 2/3 of the soils are moderately to poorly drained. These soils, classed as part of the Glenville series, occur in depressions and around the heads of drainages (Matthews and Lavoie 1970:23). This soil tends to stay wet in the spring with only a moderate availability of moisture the rest of the year due to the presence of an impervious hardpan (technically termed a fragipan).

Mapped soil types within the project area include the Glenelg and Manor soils, 3-8% slope moderately eroded, Glenville silt loams 0-3 % slope slightly susceptible to erosion, Chester loam 0-3% slope well drained, and Hatboro silt loam (Matthews and Lavoie 1970:14-15, 22-25 and sheet 5). The latter soil occurs only in the uplands in depressions and at the bases of slopes. This alluvial soil sometimes overlies an older dark soil that was the original surface layer. The Hatboro soils are among the most poorly drained soils of the county (Matthews and Lavoie 1970:24-25)

The project area is located along the headwaters of Mill Creek at approximately 200 feet above sea level. Old maps show four small drainages crossed by Valley Road. These are all unnamed tributaries of Mill Creek, which flows southeasterly into the Delaware River.

Native vegetation in the area consisted of mostly mixed hardwoods including oak, tulip-poplar, and maples (Matthews and Lavoie 1970:14-15, 23,24). In the more poorly drained soils, water tolerant hardwoods such as willow, alder, and gum trees are present (Matthews and Lavoie 1970:24-25). This sort of environment is suitable for both open and woodland wildlife, in drier locations, and for woodland and wetland wildlife in less well drained areas (Matthews and Lavoie 1970:54-55). Essentially modern conditions have prevailed at least for the last three thousand years. However, following the arrival of Europeans in the 17th century, the original aspect of the landscape has been vastly altered by deforestation, farming, mining, and other developments. Photographs on the following pages illustrate present conditions.

Paleo-Geography

Details of paleoenvironmental conditions in the immediate project area have not been examined in great depth, but reference to the synthesis of paleoenvironmental data developed by Carbone (1976, 1982) and others (Sirkin 1977; Kraft 1977; Kraft and John 1978; Hartzog 1982; Custer 1989) for other portions of the Middle Atlantic region provide a *general* basis for discussion of environmental changes over the past few thousand years in northern Delaware. These studies have been used elsewhere in the interpretation of archaeological situations in the Delaware Valley (e.g., Custer 1978). Pollen cores from the Mitchell Farm site (7NC-A-2), within a mile of the project location, provide valuable insight into ancient geographic conditions in the locale (Custer 1984). In the absence of other well established and scientifically defensible *local* paleoenvironmental record, any conclusions based upon extrapolated data must be regarded as tentative.

Figure 4: Photograph Location Map
U.S.G.S. Kennett Square, PA Quadrangle

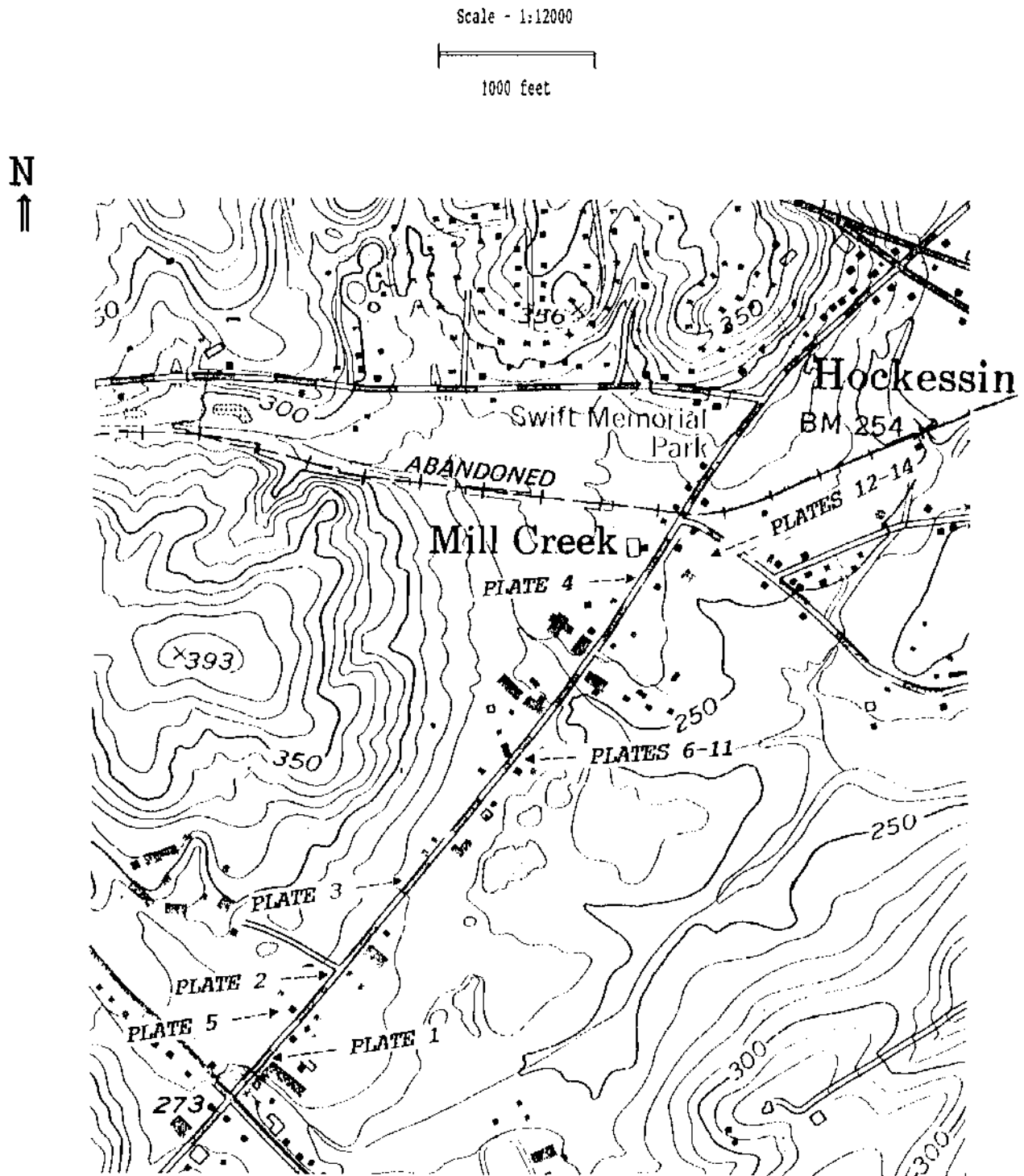


Plate 1: General View of Valley Road



Looking Southwest toward Limestone Road

Plate 2: General View of Valley Road



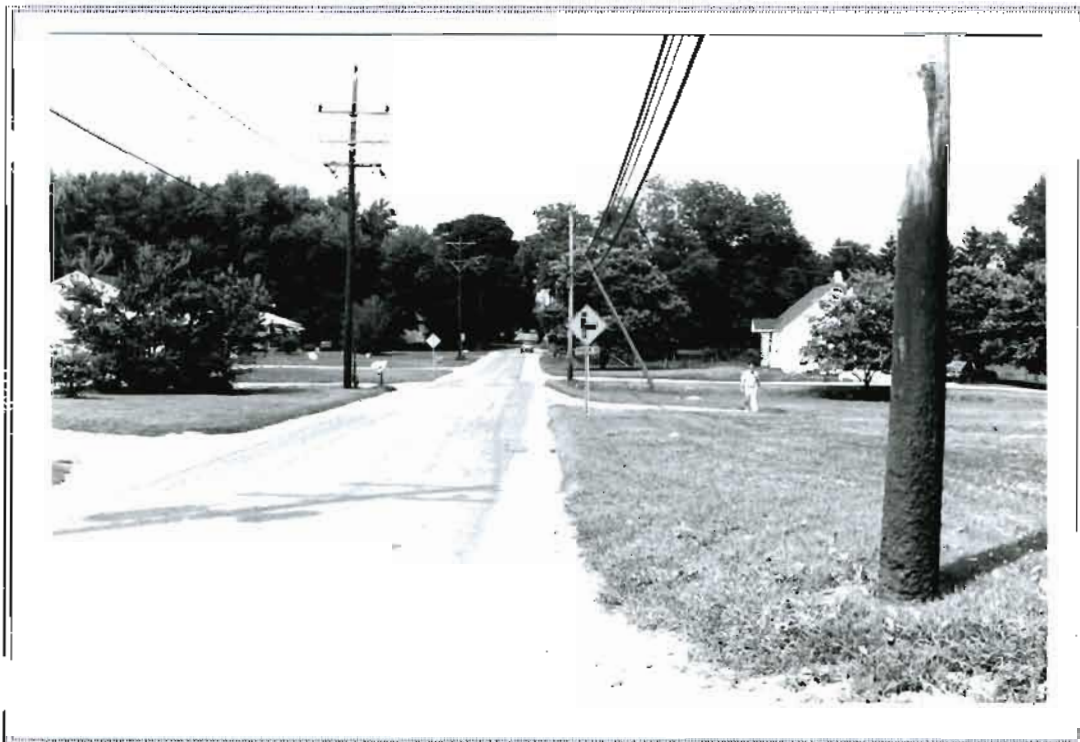
Looking Northeast

Plate 3: General View of Valley Road



Looking Northeast

Plate 4: General View of Valley Road



Looking Northeast

Based upon extrapolated pollen data, certain Mid-Atlantic archaeologists have related perceived changes in archaeological settlement patterns to episodic climatic factors, the principal of these being post-glacial warming and a subsequent period of inferred moisture stress which is referred to as the "xerothermic" (Carbone 1976, 1982; Custer 1978, 1984, 1989; Curry 1980). These episodes correlate roughly with the appearance of Paleo-Indian and Early Archaic cultures (13,000-6,000 B.C.) on the one hand and Late Archaic Cultures on the other (5,000-3,000 B.C.). Rates in the rise of sea levels in post-Pleistocene times, the stabilization of shorelines and of estuaries are also seen as critical factors affecting human settlement (Salwen 1962; Braun 1974; Custer 1978, 1984, 1987, 1989; Catlin et al. 1982; Thorbahn and Cox 1988).

Some interpretations of paleoenvironmental conditions in the Middle Atlantic region have not received universal acclaim in the archaeological community because of potential flaws in the paleoenvironmental data or the manner in which they have been collected or applied. As Arthur Joyce (1984, 1988) and John Cavallo (1987; Cavallo and Joyce 1985) have pointed out, there are inconsistencies in the inferred chronology of the xerothermic and with the data, chiefly palynological, by means of which it has been interpreted. Particularly troubling is recourse to insecurely dated, or undated, pollen cores which leads to a rather broad, inferred chronological range for the xerothermic as well as problematical reconstructions of presumably related floral (and associated faunal) communities. In addition, the very interpretation of pollen data as reflecting principally, or solely, upon past climatic conditions has been called into question (Joyce 1984; McWeeney 1984, 1990, 1990a). Finally, climatic inferences based upon geomorphological and sedimentological data (Custer 1978; Curry 1980; Curry and Custer 1982; Stewart 1985; Curry and Ebright 1989) must be

viewed with caution because of the complexities associated with local erosional and depositional events (Gladfelter 1985; Cavallo, personal communication 1986, 1987).

The following paragraphs present a summary of paleoenvironmental development in the region during late glacial and post-glacial times. Around 18,000 years ago, the Wisconsin glaciation reached its maximum southern extent in the Middle Atlantic region near the 41st parallel (Wolfe 1977), about 110 miles north of the present project location. The retreat of the Late Wisconsin ice sheet began in the vicinity of Kittatinny Mountain (in extreme northern N.J. at latitude $41^{\circ}20'$) approximately 15,000 years ago (Crowl and Stuckenrath 1977). Based upon palynological data, a cold period associated with this glaciation persisted in the Middle Atlantic region until 13,000 years ago. Even unglaciated terrain had a "periglacial" environment characterized by a cold climate with temperatures below freezing most of the year. The ground contained "permafrost," a zone of ground permanently frozen except for a shallow layer near the surface where temporary thawing might occur during warm seasons. Pollen cores from various bogs in the region indicate the presence of jack-pine, spruce, as well as tundra shrubs and herbs. By 12,400 years ago, spruce forests succeeded tundra vegetation. Pine becomes dominant in pollen cores between 11,000 and 7,000 years ago, after which oak forests prevail throughout the region (Sirkin 1977). This condition is reflected in the pollen from the Mitchell Farm Site (7NC-A-2) near Hockessin, where levels containing pine and non-arboreal pollen have been dated to 9,530 B.C. (Custer 1984:34). The amelioration of climate in post-glacial times permitted the presence of human occupation in the Upper Delaware Valley by 10,600 years ago (Crowl and Stuckenrath 1977). A cluster of Paleo-Indian finds at the

Mitchell Farm site and elsewhere in northwestern New Castle County, Delaware may be assumed to have a similar antiquity.

In late glacial times, the topography and hydrology of the region was much different than at present. Interior of the water courses the land contained many small ponds or waterholes resulting from the melting of ground ice and subterranean ice wedges in the permafrost (Wolfe 1977). These features, which survive as relict wet depressions, are known as thermo-karst basins or frost-thaw basins (Wolfe 1977). In New Jersey, archaeologists refer to these features as "pingoes" or "palsas," depending on the form and inferred geological origins (Bonfiglio and Cresson 1982). From Paleo-Indian to Late Archaic times, these basins were a focal point for human occupation, presumably as hunting places. In Delaware, basins of similar, if not identical form are commonly called "bay-basins" (Custer 1986). There are no such geomorphic features in this project area.

About 12,000 years ago sea level stood approximately 25.5 meters (84 feet) below present. Because of glacial melting, sea level had risen to approximately 14 meters (46 feet) below its present level by 7,500 Years ago (Kraft 1977; Kraft and John 1978). The subsidence of the land relative to sea level continues at a rate of approximately 1.5 meters (5 feet) per millennium (Wolfe 1977).

This subsidence has resulted in the flooding of ancient land surfaces and waterways. The ancient valley of the Delaware River was narrower and much more deeply incised than at present. Kraft and John (1978) present a paleogeographic reconstruction of the Lower Delaware River and Bay based upon geological cores, pollen analysis, and radiocarbon dating. Of particular interest are their findings with respect to geological cores taken near Holly Oak, Delaware. These cores show a partially filled tide marsh that rises about 2 meters (6.6 feet)

above mean low sea level. The base of this marsh rests unconformably on fluvial sediments at an elevation about 1.5 meters (4.9 feet) below sea level. Organic matter in the marsh sediments have been dated by the radiocarbon technique to the third millennium before the present (690 to 455 B.C.). The underlying fluvial deposits have been dated by the same technique to a period in excess of 40,000 years old.

The paleogeographic reconstruction for Holly Oak at ca. 6,000 Years ago depicts the Delaware River with a maximum width of 500 meters (1640 feet) (Kraft and John 1978; Fig. 7). A narrow band of tidal marsh separated the river from the adjoining uplands. This reconstruction reflects conditions during Middle Archaic times. Given the available information, one can reasonably infer that the river was substantially narrower in Paleo-Indian and Early Archaic times, with the left bank of the ancient Delaware standing in or near what is now the ship channel. These reconstructions imply that major settlements of ancient populations along the Delaware River have been inundated by rising water levels, and probably lost to erosion and dredging in historic times.

As nearly as can be determined with the limited data now in hand, the local climate and landforms as well as flora and fauna had begun to approximate their present configurations by Archaic times [c.7000 years ago] (Salwen 1975; Sirkin 1977; Kraft 1977), though new evidence suggests that vegetation very similar to modern communities may have been present as early as 10,000 years ago (McWeeney 1990). At the Mitchell Farm site (7NC-A-2) pollen of oak and hemlock has an associated carbon date of 5840 B.C. Late pollen profiles at that site show an increase in hickory and non-arboreal pollen (Custer 1984:35). By Late Woodland times an essentially modern environment had emerged (Custer 1984; 1989). Throughout the period described by human habitation in the region

vegetative and wildlife communities can be expected to have varied somewhat in composition and distribution in response to changes in environmental conditions, including the pressures exerted upon them by aboriginal population. Some of the conjectured shifts in ecological relationships would have, in turn, resulted in changing adaptations by resident human populations. Further treatment of this topic can be found in the following discussion of regional archaeology.

Archaeology

Currently recognized prehistoric sites in the Mid-Atlantic region represent a broad range of cultural expressions ranging from Paleo-Indian occupations (with an antiquity of perhaps 20,000 years) to those of the Late Woodland Period (which ends with European incursions in the 17th century). Intervening cultures including Archaic (comprising Early, Middle and Late phases) and Woodland (also comprising Early, Middle and Late expressions) are in evidence.

Throughout the region the traditional cultural-temporal sequence has been described, with variations, as follows: Paleo-Indian (12,000 B.C.- 7000 B.C.); Early Archaic (7000 B.C.- 6000 B.C.); Middle Archaic (6000 B.C.- 4000 B.C.); Late Archaic (4000 B.C. - 2000 B.C.); Terminal Archaic or Transitional (2000 B.C.- 1000 B.C.); Early Woodland (1000 B.C.- 500 B.C.); Middle Woodland (500 B.C. - A.D. 1000); and Late Woodland (A.D. 1000 - A.D. 1600). Because the physical traits and underlying cultural behaviors that archaeologists use to discriminate between cultural-temporal units frequently show continuities as well as distinctions, a variety of classificatory schemes have been developed over time. In addition, estimations of age for archaeological cultures continue to be refined. Since each cultural-temporal classification is an heuristic construct,

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having no reality beyond its usefulness in science, each scheme is valid in its own frame of reference.

In Delaware, Custer (1984) has advocated a cultural temporal sequence that emphasizes the continuities and changes in environmental settings and their reflections in cultural-ecological adaptations through time. His sequence is as follows: Paleo-Indian (12,000 B.C.- 6500 B.C.); Archaic (6500 B.C.-3000 B.C.); Woodland I (3000 B.C.- A.D. 1000); and, Woodland II (A.D. 1000 - A.D. 1600). Custer's Woodland I period embraces elements traditionally included as traits of the Late Archaic through Middle Woodland periods. His Woodland II period is essentially equivalent to the traditional Late Woodland period. Readers will find reference to both classificatory schemes in the present report.

Most of the known archaeological sites of the prehistoric era occur on well drained ground near streams, springs or other bodies of water where hunting, fishing, or food collecting and processing could be profitably pursued, or where non-comestible resources could be procured and processed. Because of environmental changes -- brought about by natural processes or human agency -- present surface hydrology is not always an accurate indicator of site location. Most of the recognized sites appear to represent intermittent occupations oriented to specific tasks in a seasonal round. More permanently occupied locations were situated in locations that offered exceptionally rich ecological diversity or concentrated economic resources. In piedmont physiographic regions, the largest sites are situated around limestone sinkholes or on flats near springs or adjacent to the heads of actively running streams.

Archaeologists believe that the sites of aboriginal settlement served a variety of purposes necessary for the sustenance of life and that the functions performed at one site were related to those performed at others. Custer (1984)

has offered variations on a model of settlement systematics whose main dynamic force was the social regulation of population segments through a process of seasonal fissioning and aggregation. The elements of the general settlement scheme were macro-band base camps, micro-band base camps, and procurement camps.

The largest and most permanent settlements were macro-band base camps, situated in locations with sufficient resources to sustain relatively large groups of people (i.e. so-called macro-bands) for prolonged periods. Macro-band camps covered relatively large areas, perhaps 2½ acres (1 hectare) in extent. Such sites might contain hundreds or thousands of artifacts including utensils, tools, and weapons.

Micro-band base camps were settlements peopled by small groups (i.e., so-called micro-bands), fissioned off of the larger groups or macro-bands in pursuit of required resources that might be seasonally or opportunistically available. Micro-band camps might contain hundreds or tens of artifacts but with less frequency and variety than displayed at macro-band camps.

Procurement camps were ephemerally occupied by individuals or small groups as required to supplement stores of food or other raw materials. Such sites might contain only a few artifacts, including stone flakes, one or two bifaces, and possibly one or more ground stone tools. The assemblages revealed at procurement sites would be expected to occur in limited variety, with a focus to the exploitation of specific target resources.

The following pages offer a summary of archaeological sites identified in proximity to Valley Road. This summary derives from background research for the present work and from the writings of Jay Custer (1984) and others (Custer and Hodny 1989).

Three prehistoric sites had been previously identified by others in the Hockessin vicinity. These sites are the Mitchell Farm (7NC-A-2), the Hockessin Valley site (7NC-A-17), and an unnamed site (7NC-A-3). The Mitchell Farm (7NC-A-2) is located about 3/4 miles northwest of the village of Hockessin in the very headwaters of Mill Creek. The site, reported by Custer (1984), contains a variety of artifacts indicating use as a macro-band base camp during Late Archaic and Early Woodland (a.k.a. Woodland I) times and into the Late Woodland (a.k.a. Woodland II) period (Custer 1984:105, 136, 155). The assemblage includes stemmed and triangular bifaces, stone tools, and pottery.

The Hockessin Valley site (7NC-A-17) was discovered along Route 7 about ¼-mile southeast of the intersection with Valley Road (Custer and Hodny 1989). The site overlooks a wetland surrounding a headwater to Mill Creek. Archaeological excavations revealed eight truncated postmolds surrounding a stone hearth. The area circumscribed by the postmolds is reported as 25 square meters (269 s.f.); the surface area of the hearth is 2.25 square meters (24.2 s.f.). The authors conclude that the composite feature (including postmolds and hearth) was an aboriginal house. Analysis of charcoal from the hearth returned an age estimate of 5205 B.P.±70 radiocarbon years (3255 B.C.). The excavation yielded a meagre assortment of 279 non-diagnostic stone artifacts. About 85% of the artifacts (236/279) are flakes. Unfinished bifaces and fragments, totalling 13 specimens, are probably tools rather than weapons; however, one biface displayed tip fracture imputed to reflect use as a projectile point. Four cores were inferred to be parent material for flake tools. A rough stone hammer was also found. From the foregoing the authors adduce that the Hockessin Valley site (7NC-A-17) was a small base camp or procurement staging site.

The Delaware Bureau of Archaeology and Historic Preservation reports a prehistoric site (7NC-A-3) "located along Mill Creek behind the old school house." The prehistoric site lies on the east bank of a tributary to Mill Creek, opposite the old school. The "old school house" now houses the Lamborn Library, near the northern project terminus. The official record indicates that the prehistoric site was recorded in 1955. Surface-derived artifacts include 27 points, 22 potsherds, and a total of 70 other specimens, said to be "bifaces." No detail is given as to the typology of these bifaces.

The artifacts specifically identified as projectile points include: 16 narrow stemmed points (9 with contracting stems, 7 with square stems); 1 Fox Creek point; and 1 triangular point. The remaining nine projectile points are classified as "other."

The potsherds include: 3 Riggins Incised sherds; 2 Hell Island sherds (one each of corded and fabric-impressed varieties); and 1 Wolf Neck sherd. The remaining 16 potsherds are listed as "unidentifiable."

Apparently, all of the items in the inventory are surface finds. The record makes no mention of excavations or subterranean sampling. Thorough testing of this site during the present work confirms the lack of any cultural remains in undisturbed contexts. Based upon evidence now in hand, it would appear that this site was a small base camp, intermediate in size and complexity between the Mitchell Farm site (7NC-A-2) and the Hockessin Valley site (7NC-A-17).

Archaeological prospecting in the course of the current work led to the discovery of a previously unreported prehistoric site that overlooks a headwater of Mill Creek near the intersection of Valley Road and Evanson Road. This site yielded only a few stone flakes and a few sherds of late prehistoric pottery

reminiscent of the Riggins Fabric-Pressed or Minguannan types. All of the artifacts found at this site during the present investigation were confined to the plowzone.

Historical Summary

In 1699 William Penn had surveyed two parcels of land, of roughly 15,000 acres each, for his two children, William Jr. and Letitia Penn. Letitia's portion included what is now northern Mill Creek Hundred, and part of southern Chester County, Pennsylvania. This parcel was known as Stenning Manor, but was never developed by Letitia. In 1713, pressure from squatters resulted in the Manor being divided and sold in large lots during the next quarter of the century (Kise, Franks and Straw 1991:2; Lake 1976:20).

The partition and sale of Stenning Manor attracted many of the first settlers to the area. Between 1720-1770 the dominant immigrant groups were Scotch-Irish and English Quakers. The Scotch-Irish were mostly of the middle and lower middle classes. These people were largely destitute, and perhaps as many as half entered the colony as indentured servants. The English Quakers were usually better off financially. This group were often second and third sons of landed English gentry and were in a better position to invest money in land (Lake 1976:18).

Simon Hadley II, his wife, Ruth, and six children, Quakers from King's County, Ireland, came to Delaware in 1712. They purchased 1,200 acres of Stenning Manor. After Hadley was killed by a servant in 1756, much of his property was sold, particularly to members of the Springer family (Lake 1976:20-21).

The Springer family, being of Swedish decent, had originally been attracted to the Swedish settlement in New Castle, Delaware. In 1729, Charles Springer became the first in the family to buy property in Mill Creek Hundred. By 1785, His brother, Nicholas, had purchased all of the former Hadley land east of Limestone Road, from the Pennsylvania border to Valley Road. Part of this land had belonged to one John Dixon. Dixon's son, John, had established a 265 acre homestead on Valley Road. The original house, although much altered, still stands at 730 Valley Road (Lake 1976:23).

By 1800 all the lands belonging to the Hadley family had been sold, and their name disappears from the area. The Dixon and Springer families were also of short duration. Early maps dating from 1820, 1849, and 1868 show that the Dixon and Springer holdings were gradually purchased by members of the Wilson family. This large Quaker family bought the Dixon farmstead in 1869. It later became known as Willowgrove (Lake 1976:26).

In 1771 James Jackson purchased two adjoining parcels of land from John Dixon. These parcels totaled 250 acres. A descendant of James Jackson, State Senator John G. Jackson, was to have considerable influence in the Hockessin area in the mid 1880s (Lake 1976:26,29).

During this early period of settlement, the economic focus in the Hockessin area was mainly on agriculture and milling (Kise, Franks and Straw 1991:3). Since most of the families were Quakers, the town of Hockessin grew up around the Friend's Meeting House. The Meeting House was built in 1783 along Old Wilmington Road, one of the few primary roads in the area. Another important primary road was "Limerock", or Limestone Road, which roughly paralleled Old Wilmington Road further to the west. These two primary roads were located on high ground following the trend of streams flowing through the region. Valley

Road appears on a map by 1823, serving as a connecting road between these two early primary routes (Lake 1976:35-37). Tweed's Tavern, one of the few taverns along Limestone Road, was situated at the intersection of Limestone and Valley Roads (Kise, Franks and Straw 1991:2). Recent renovations of that property, now known as the Duthrie-Giacomelli House, exposed remains of three log walls in the old part of the house (Bureau of Archaeology and Historic Preservation Micro Fiche Files 1973:N-1101). This structure also appears on late 19th century maps of the region and is identified as belonging to T.L.G. Baldwin (Beers 1868, Hopkins 1881).

In 1820, the discovery of kaolin deposits in southeastern Pennsylvania and subsequently in northern Delaware, changed the primary economic focus of the region from agriculture to mining. Israel Hoopes and a field-hand named, Thomas, were digging post holes on their farm near the former hamlet of Buenos Aires, Chester County Pennsylvania. At a depth of two feet they hit a white clay deposit. Results from analysis at the assayer's office showed this deposit to contain 48% silica, 37% aluminum, 13% water and 2% other impurities. In composition, this clay resembled kaolin ($H_4 Al_2 Si_2 O_9$), which was valuable for the production of porcelain and other ceramic products.

Upon finding deposits of kaolin, Hoopes and his neighbors abandoned farming and began mining. Recognizing the economic value of the white clay, residents soon afterwards changed their village name from Buenos Aires to Kaolin.

In the early days, kaolin mining was labor intensive, markets were limited, roads were poor, and shipment from Newport, Delaware was costly. In addition, the practice of open-pit mining was dangerous and destroyed valuable farmland. These limitations restricted the early commercial exploitation of kaolin.

However, the leasing of land to investors yielded royalties to local residents (Lake 1976:96).

Local inhabitants did not profit from the kaolin industry as much as the investors, such as Israel Lacey, James Burgess, and Moses Golding (Lake 1976:96). Some local inhabitants, including Josiah and Ephraim Wilson and James Jackson, became involved with the prospecting investors. In 1869 Israel Lacey purchased tracts from both James Jackson and Josiah Wilson. Lacey also obtained a 5-year lease on Ephraim Wilson's farmstead. The agreement stated that Lacey could extract up to 3,000 tons of kaolin and other minerals per year from Ephraim's land. Should more than this amount be extracted, the Wilson family was to receive a payment of fifty cents per ton on the balance. At the end of the lease, Lacey was to restore the lands in good order (Lake 1976:94).

In October of 1881, Israel Lacey sold his interests in the valley to James Burgess. Burgess was an innovative man and developed a system of shaft mining. "Six by six inch wooden beams . . . about ten feet in length were placed around a hole to form an octagonal shaft thirty feet across. The beams were fastened together with wooden pegs . . . as the shaft was dug deeper . . . men would enter the hole and insert an additional rim of beams" (Lake 1976:94). These shafts would reach depths of 50 to 120 feet below the surface. Often shafts were placed right next to each other. Golding observed Burgess's method and modified it by eliminating the use of pegs. Golding secured a patent on this method of shoring (Lake 1976:94).

Competition was fierce. Often investors not only stole each other's ideas, but worked side by side in deep shafts separated only by imaginary boundary lines. Impetus came from a growing pottery manufacturing industry in New Jersey and Ohio, as well as from improved transportation in the form of railroads, such

as the Wilmington and Western Railroad (formed in 1872). By 1875, Hockessin had a single industry: kaolin mining. Virtually every able-bodied, man, woman, and child sought employment in the mines (Lake 1976:144).

The kaolin industry swelled the population of Hockessin and made necessary the establishment of more schools. The Lamborn Library, located at Valley Road and Old Lancaster Pike, was originally erected as a one-room school. Built in 1870, the school measured approximately 36 by 29 feet. The stone foundation walls were 20 inches thick, enveloping a basement floor several feet below grade. In 1890, a second floor, built of brick, was added. An eight-foot extension was added to the west end of the building. This addition enclosed the stairway and created an open, brick-arched portico that still shelters the original doorway of the old school house. While the building served as a school, it also had a small bell tower piercing the roof-line. In recent years, the building has served as a library and is now listed upon the National Register of Historic Places (Bureau of Archaeology and Historic Preservation 1973;micro-fiche N3863).

By 1904, the kaolin industry had reached its apex. After fire destroyed the Golding works in 1943, the kaolin industry disappeared from the Hockessin Valley (Lake 1976:96).

Beginning in the mid-19th century, other notable residents established businesses based on the mining of limestone. Among these was John G. Jackson, born in 1818. In addition to industry and commerce, Jackson had other interests including mathematics, astronomy, and philosophy.

In 1842 Jackson opened the Jackson limestone kilns in the south meadow of the family farm. The location of his operations was south of Valley Road and connected to it by what is today, Evanson Road (Baist 1893).

At the time, limestone was mostly used to improve local roads, as a building material, and for tombstones. Jackson's quarry did not produce pure limestone but rather a metamorphosed granite, which proved to be a better material for building and tombstones. He even offered a sample of his stone for the proposed Washington Monument (Lake 1976:161).

The quarry and kiln were financially successful. Jackson also engaged in supplying lumber for the building of railroad cars and willow logs for the Du Pont Powder Mills along the Brandywine. The willow was converted to charcoal, necessary for the production of black powder. Both the quarrying of limestone and the gathering of large willow limbs along Mill Creek continued throughout the Civil War Period.

With wealth from his various enterprises, Jackson built a stone house "*. . . on high ground at the south meadow on Valley Road. On the other side of the road he also erected a beautiful red barn, with all the gingerbread trim of that day*" (Lake 1976:161).

Jackson moved on to a career in politics. In 1864 he was elected to the State Legislature on the Republican ticket (Lake 1976:162).

During 1871-1872, Jackson was the chief construction engineer for the Wilmington and Western Railroad, which he also helped to organize and finance (Lake 1976:162). Local farmers and industrialists hoped this new line would connect them with western markets. Caught in the economic crash of 1883 (Hoffecker 1973:171), and with other problems, the line never reached beyond Landenberg, Pennsylvania, about five miles west of Hockessin (Williams 1985:73). It remained a minor road largely dependent on the limestone shipments from the Red Clay Creek (Hoffecker 1973:171) and Mill Creek valleys.

Jackson eventually retired from his profitable limestone operation in 1880. He then built a "semi-retirement" home called Sunset Cottage located on the northeastern corner of Southwood and Valley Roads. The third floor of Sunset Cottage consisted of a tower that was in actuality an astronomical observatory that could be positioned by means of a hand-turned crank (Bureau of Archaeological and Historic Preservation 1973: microfiche N 10-178). After Jackson died in 1897, Sunset Cottage burned and was later rebuilt without the third floor observatory (Lake 1976:159, 161). This house has been found eligible for the National Register (Kise, Franks and Straw 1991: Figure 7).

The need for stone masons and laborers in the limestone industry attracted a new group of immigrants to the Hockessin area. These immigrants, largely Italians, were recruited to work in the stone quarries almost as soon as they landed on Ellis Island in New York Harbor (Lake 1976:188-189). As the need for limestone continued to grow -- especially in the building of Delaware's roads between 1920-1930 --, these newcomers remained in the Hockessin area (Lake 1976:188-189).

Having settled in the region, Italians were responsible for the development of the local mushroom industry. In 1895, a Kennett Square farmer imported a jar of "brick spawn" mushrooms from England. Soon people in southern Chester County Pennsylvania were growing mushrooms anywhere they could: in cellars, poultry houses and abandoned barns (Lake 1976:185).

Soon the mushroom industry flowed over the Pennsylvania border into northern Delaware. In 1910, Merit Dixon, a railroad station agent in Hockessin built a mushroom house out of terra-cotta brick. Brick, or stone mushroom houses, allowed for better temperature control than frame structures. Temperature regulation is critical for the survival of mushroom spores that grow

in absolute darkness at a temperature between 50-65 degrees. Prior to using masonry construction for mushroom houses, production had been limited to only spring and fall growing seasons. Entrepreneurs Nixon and James Miles, used abandoned fire-brick works in Southwood for their mushroom business. This enterprise kept the railroad active to Southwood until 1957, long after it had ceased service to Landenberg (Lake 1976:186).

After 1910, mushroom production doubled about every two years. The innovation of growing the spores on composted manure from stock yards near Lancaster, Pennsylvania and the introduction of air-conditioning about 1930, meant that a new crop could be produced every ten weeks (Lake 1976:186). Soon there were several canneries that processed mushrooms for commercial sale. The canning of mushrooms led to the canning of truck crops as well. The canning industry survives to the present in the region.

The present landscape -- studded with residential developments and shopping centers -- reflects ongoing changes from a former agrarian and industrial economy to one based on commercial enterprises in the growing suburbs of Philadelphia and Wilmington.

Survey Results

This survey combined elements of both Phase I and Phase II investigations. The entire project alignment has been investigated at the Phase I level of survey. Four locations were investigated at the Phase II level. The accompanying map indicates the site locations (Fig. 3). A provenience-keyed artifact inventory is appended.

The four sites that were identified and investigated in detail include both prehistoric and historic-era remains. The sites include the Springer House (7NC-A-80), the Thompson House (7NC-A-82), Site 7NC-A-3 (Locus B), and the Wingwall/Stone Barn Site (7NC-A-81). The following table summarizes the finds at these locations:

Site	Artifacts from Test Units (1± s.f.)		Artifacts from Excavation Units (12.5 - 25.0 s.f.)		Total Artifacts
	Aboriginal	Historic	Aboriginal	Historic	
Springer	3	29	33	345	410
Thompson	5	30	16	8	59
7NC-A-3(B)	9	2	0	0	11
Wing Wall	0	0	0	17	17
Total Artifacts	17	61	49	370	497

The sites are listed and briefly described below. In the following descriptions are given the site name and/or designation, references to project plan (by Sheet and Station Numbers), and property ownership as listed at the time of the survey.

1) Springer House: Site 7NC-A-80 (prehistoric/historic)

Project Plan: Sheet 6

Location: Northwest side of Valley Road at Station Number 42-43

Owner: Valley Road Partnership

On this lot is a house built by George Springer in 1852, with additions constructed in the late 19th and 20th centuries. Sixteen (16) posthole tests were placed in the yard and grounds. This testing yielded three (3) prehistoric artifacts, and 29 historic-era artifacts. Three (3) larger units (2½ x 5 feet) were placed as follows: adjacent to the late 19th century addition; adjacent to the original structure; and, in the rear yard. The deployment of units is depicted in Figure 5. These excavation units yielded 33 prehistoric artifacts and 345 historic-era artifacts. The total recovery is 410 pieces.

The aboriginal artifacts from post-hole testing include one reduction fragment, one flake, and one biface fragment, all rendered in quartz. Excavation Unit 2 yielded 2 quartz flake fragments. Excavation Unit 3 produced an early-stage biface fragment, 3 primary flakes, 3 thinning flake fragments, 1 late-stage flake, 11 flake fragments, and 2 reduction fragments. All of the foregoing and one thermally-altered piece are of quartz. Two jasper artifacts were found in this unit. One is the basal ear or tang of a biface fragment, judged to be a triangle from its form. The other is a thinning flake fragment. Primary flake fragments were found, one each of felsite and quartzite.

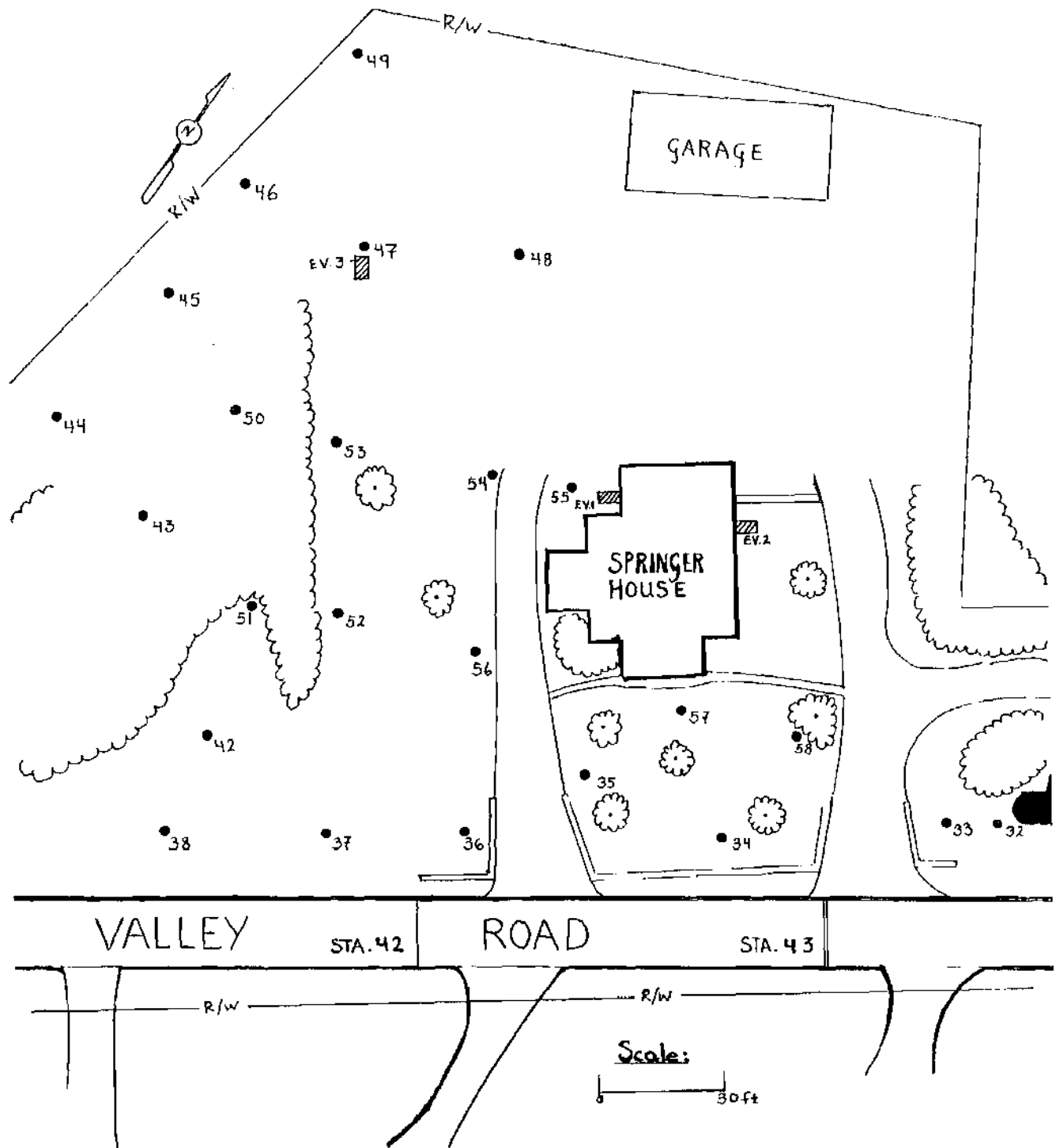
The mundane and fragmentary character of the finds militates against cultural-temporal identifications. The jasper specimens may be of late prehistoric origin (ca. A.D. 1000), as gauged by form and material. The rest remain problematical; however, a Late Archaic/Early Woodland assignment (ca. 1000 B.C.) would not be troublesome.

Plate 5: Springer House



Looking North

Figure 5: Plan of Testing at 7NC-A-80



The prehistoric cultural remains just described were found in a field to the southwest side of the house. Field observations demonstrate that the artifacts reside in a fill deposit. Accordingly, the prehistoric component at this site requires no additional attention.

Investigations revealed plowed ground; also ground that was both filled and plowed. The original portion of the dwelling has a minuscule builders' trench, too small to reveal information concerning original construction. The late 19th century addition has a larger builders' trench containing artifacts of the period, including an 1880 Indian head penny. See the artifact inventory in Appendix II for a complete listing. Soil profiles in the rear yard show one or two episodes of fill between the west side of the house and the stream channel to the west.

Cultural material related to the original occupation of the house may exist in the crawlspace beneath the rear (late 19th century) addition floor. Evidence may also be found in the dirt floor of the basement. These locations cannot be investigated by conventional techniques while the house is occupied. Investigation of these areas after evacuation of the tenants, but before demolition of the structure, is strongly recommended.

2) Wingwall/Stone Barn: Site 7NC-A-81 (historic)

Project Plan: Sheet 9
Location: Station Number 65
Owner: Blackburn

Evidence of a stone barn in this location exists in a remaining wingwall adjacent to Valley Road, and in large, clustered rocks visible on the ground surface. A local resident recalled the barn in ruinous condition in the 1930's

and 1940's. The date of construction and original dimensions are not known. The barn was demolished in the 1940's.

The barn apparently sat 20 feet or so from the southeastern side of Valley Road. Next to the road is a stone wingwall, that rises about five feet above the road surface. According to a local resident, this wall retained an earthen ramp between the road and the proximal barn wall. This ramp provided access for loading or unloading cargo directly into the second story of the barn. The first story, at ground level, housed livestock.

Five (5) posthole shovel tests were opened in this location, as well as an exploratory cut that measured approximately 3 x 5 feet. Posthole shovel tests detected nothing but building rubble. The larger cut revealed a toppled wall section remaining from demolition. Prospecting with a metal detector revealed a few pieces of agricultural hardware (pitchfork and shovel fragments, plowshare, etc.), thus confirming the indicated use. See the artifact inventory in Appendix II for a complete listing. The deployment of units is depicted in Figure 6.

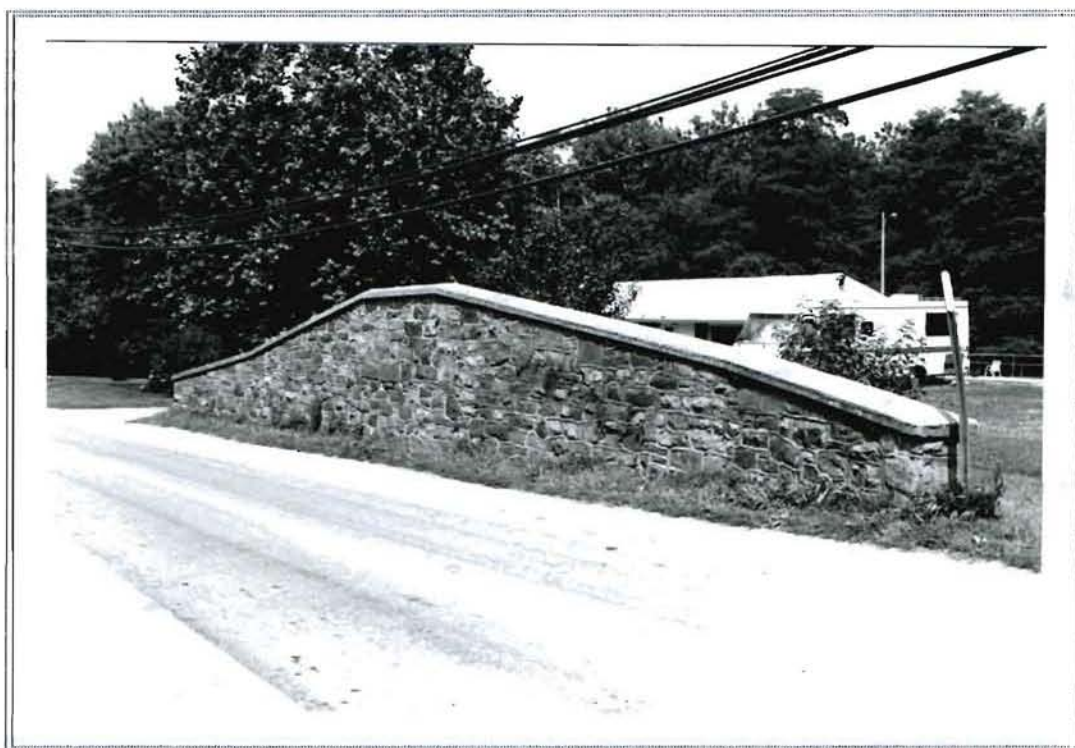
The archaeological and architectural elements of this site do not constitute cultural resources. Additional work is not recommended.

3) Thompson Property: Site 7NC-A-82 (prehistoric and historic)

Project Plan: Sheet 18
Location: Station Number 82
Owner: Clara Smith

This property lies in the southeast corner of Valley and Evanson Roads. A total of 73 posthole shovel tests were excavated in this location, along with two (2) excavation units (2½ X 5 feet each). The deployment of units is depicted in Figure 7.

Plate 6: The Wingwall



Looking East across Valley Road

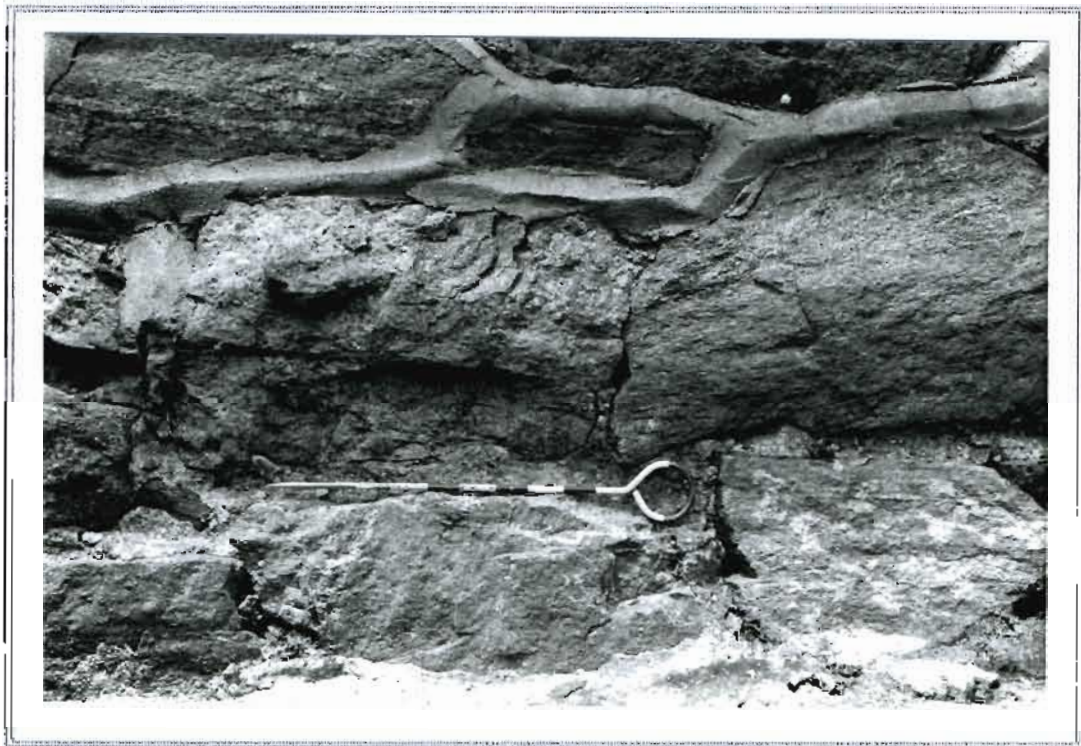
Plate 7: Detail of Wingwall



Looking West

Note concrete cap and shaped mortar joints. An earthen ramp, now removed, rose to the elevation of the rock ledge at the foot of the wall. The house in background is on the northwest side of Valley Road, opposite the Wingwall.

Plate 8: Detail of Wingwall



Note shaped mortar joints above ramp grade.

Plate 9: Collapsed Barn Wall, Exposed in Cut



Agricultural artifacts on tarpaulin were discovered nearby.

Plate 10: Detail of Collapsed Barn Wall



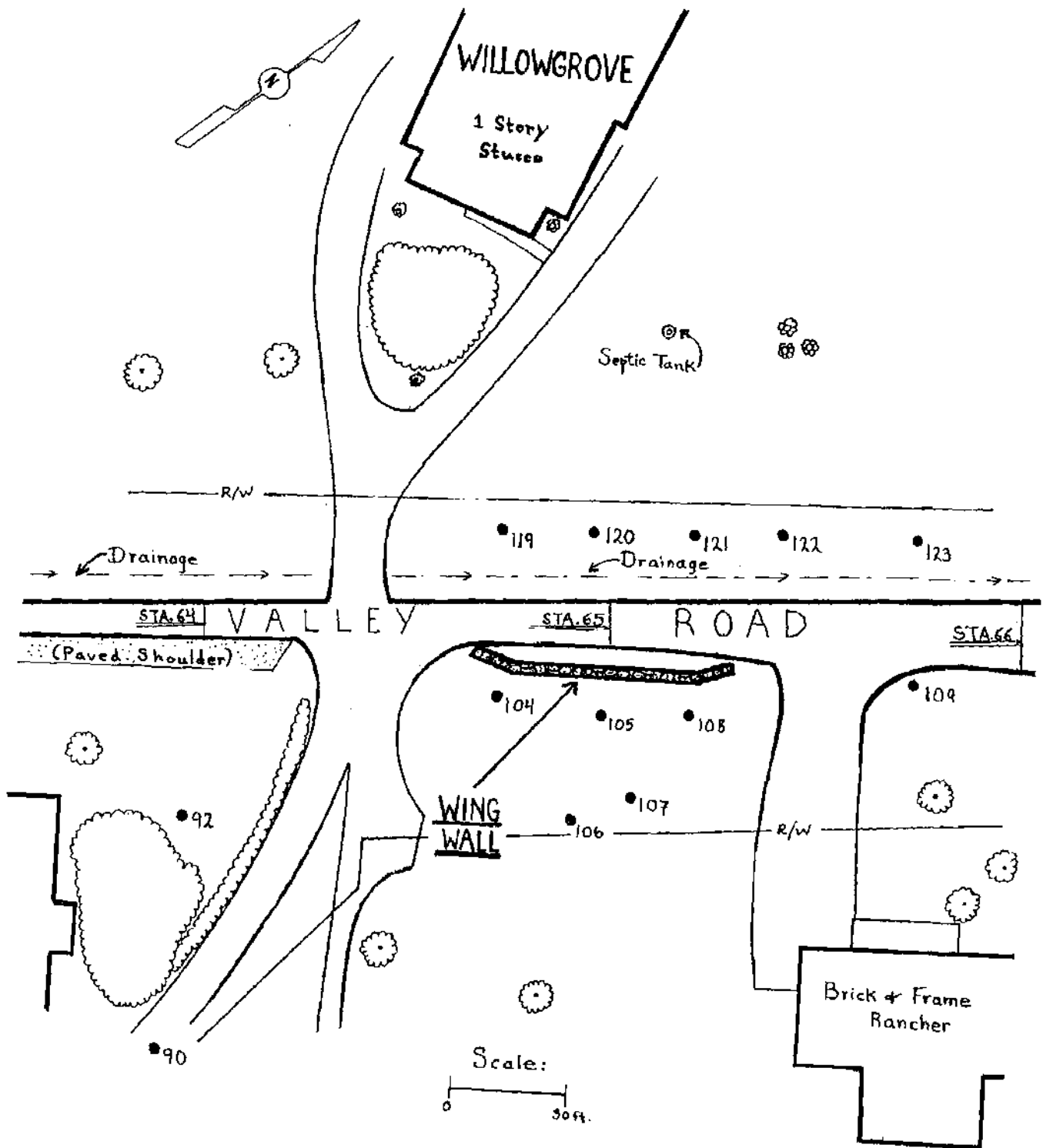
Surveyor's chaining pin gives scale

Plate 11: Artifacts from the Barn Site



Items on tarpaulin include a plowshare, broken pitchfork, three pieces of lightning rod strap, cast iron pipe fragment, cultivator shovel, harrow spike, shovel blade (lacking ferrule and handle), machine bolt, and lug wrench. Surveyor's chaining pin gives scale.

Figure 6: Plan of Testing at 7NC-A-81



Prehistoric artifacts, found only in the plowzone, comprise a few flakes of chert, quartz and jasper as well as a few ceramic sherds of late prehistoric age (ca. A.D. 1000-1500). Posthole shovel testing produced 3 quartz flake fragments, one early-stage flake fragment of jasper, and one small fabric-impressed sherd (Riggins or Minguannan).

Excavation Unit 1 yielded 16 artifacts. These finds include 4 quartz flake fragments, 2 quartz reduction fragments, 2 pieces of thermally-altered quartz, 3 quartz or schist fragments, and 1 quartz core tool fragment. One thinning flake of Newark jasper was found. Three small late prehistoric sherds were recovered. Two are fabric-impressed and one is decorated with finely-incised lines over a smoothed surface.

The characteristics of paste, temper, surface finish, and decoration make the chronological assessment of the sherds quite secure. The largest sherds do not exceed 1 cm² in surface area. The subsoil, very compact and loamy, contained no artifacts or features.

The historic component of the site is represented by a foundation consisting of schist, quartz, sandstone laid up with a sandy mortar. The structure appears to have been burned and demolished. Very few artifacts were found during testing, mostly modern domestic debris (glass fragments and food-service ceramics, ca. 1940-1960). Most of these artifacts were not collected or quantified. Typical examples appear in the artifact inventory (Appendix II). Structural rubble, also modern in type and material, was frequently detected. The most outstanding element of the historic component is a WWI-vintage Farmall tractor.

Due to the paucity of the finds and the complete lack of remains in undisturbed contexts, this site is not recommended for further work.

Plate 12: Thompson House Site, Abandoned Farmall Tractor



Plate 13: Thompson House Site, Partially Exposed Foundation



Spade gives scale

Plate 14: Thompson House Site, Prehistoric Site



General View toward Southeast

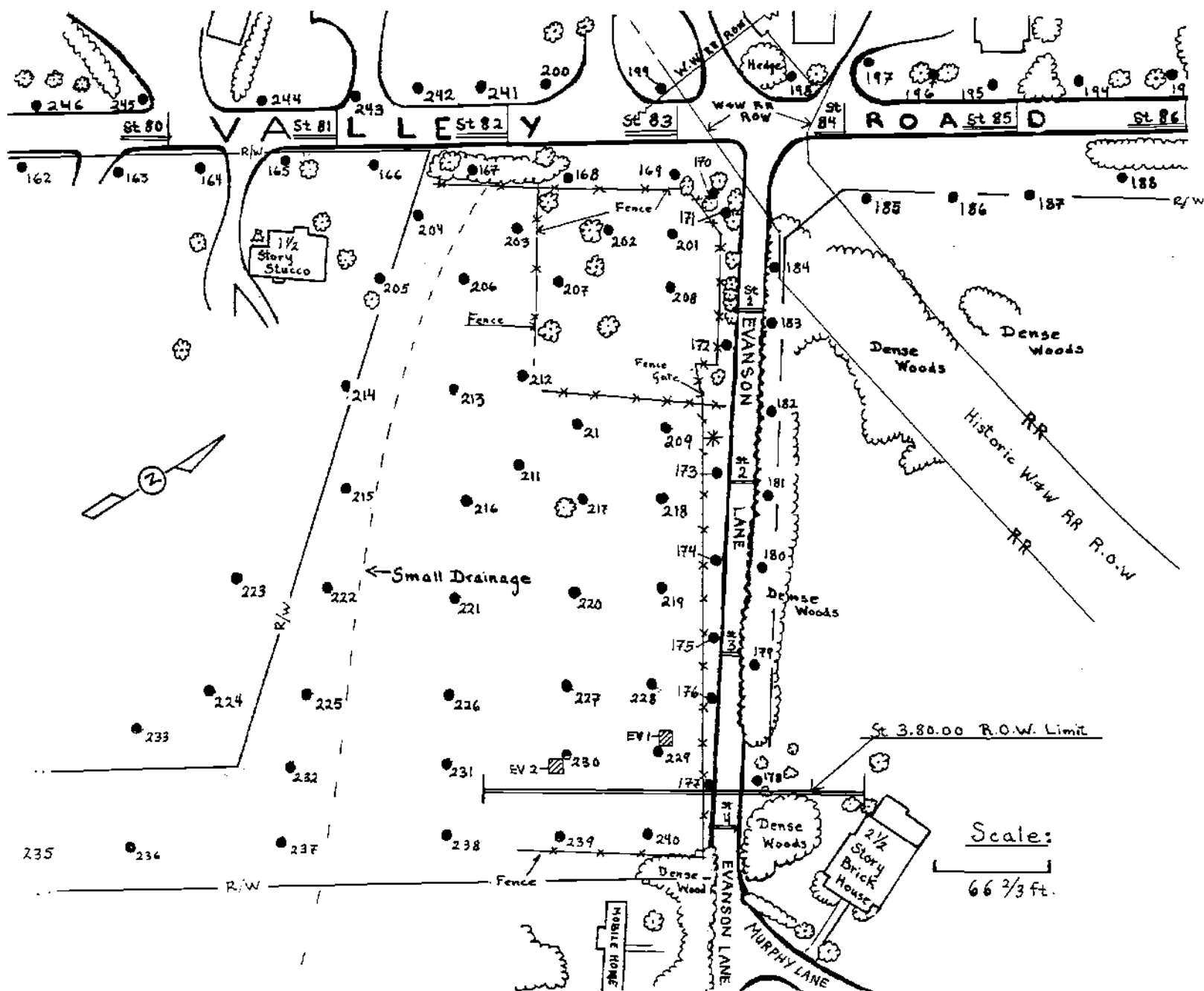
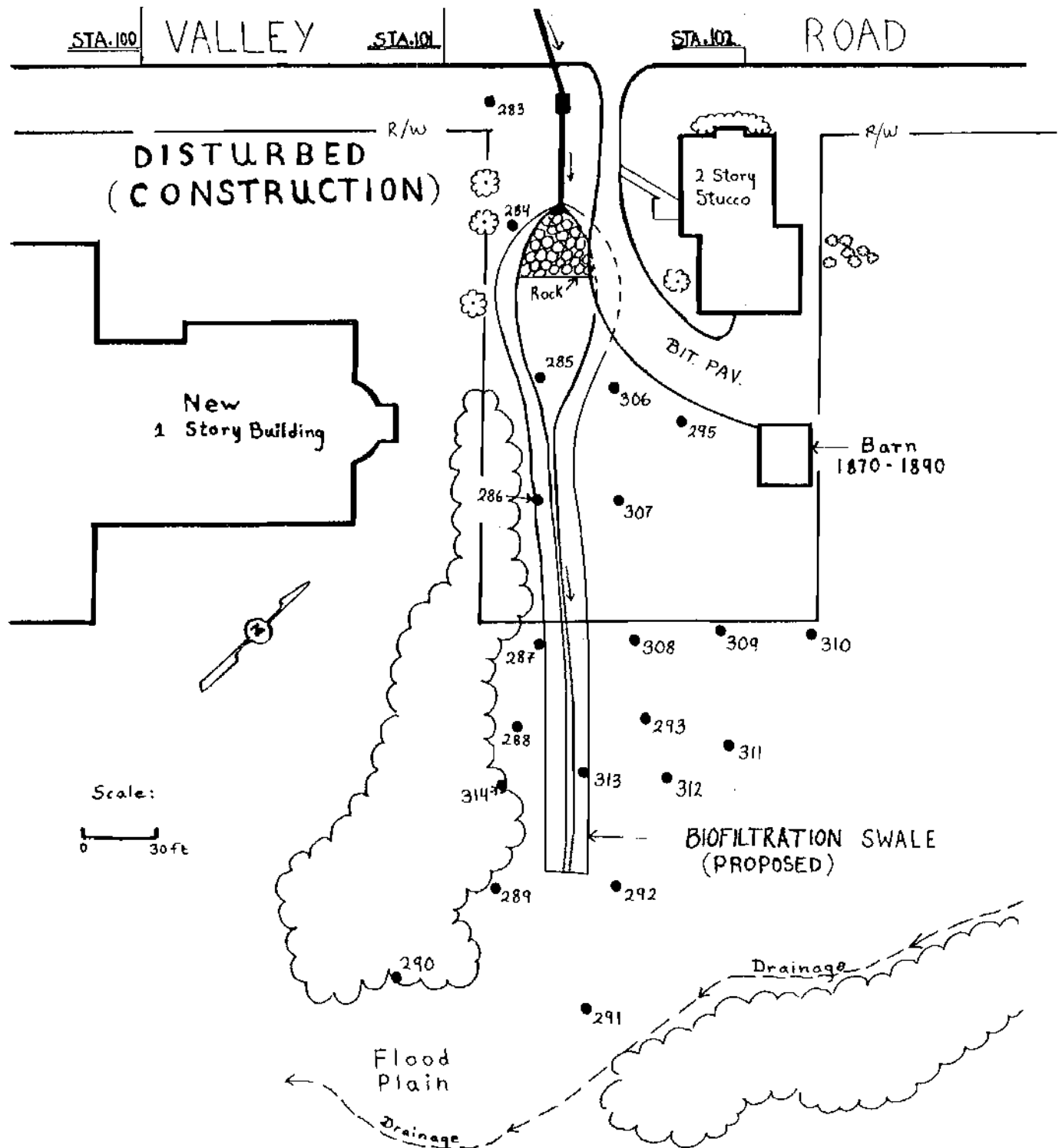


Figure 7: Plan of Testing at 7NC-A-82

Figure 8: Plan of Testing at 7NC-A-3 (Locus B)



4) Prehistoric Site (7NC-A-3, Locus B)

Project Plan: Sheet 21
Location: Station Number 102
Owner: Joseph and Elsie Kelly

This property includes a standing structure which will be removed prior to the proposed road widening. The structure has no historic merit (Kise, Franks and Straw 1991). Prehistoric artifacts, including several bifaces, were reportedly found in this vicinity about 1955. The original finds occurred on the east side of a small stream that feeds Mill Creek. Locus B, identified in the present study, is on the west side of the stream. In the current work, a total of 22 posthole shovel tests were excavated at intervals of 25± feet (Fig. 8). Prehistoric artifacts, found only in the plowzone, comprise 4 pieces of thermally-altered quartz or quartzite and 5 pieces of quartz debitage. One reduction fragment of schist and one late-stage flake of quartzite were also found. No hint of formal or culturally diagnostic artifacts was observed. The subsoil, very compact and loamy, contained no artifacts or features. Additional work is not recommended.

All other portions of the project alignment were found to have severely disturbed earth and/or a dearth of cultural remains. Except as noted, no additional archaeological services are recommended.

Considerations of Significance

The following are the criteria established by the Secretary of the Interior for use in evaluating and determining the eligibility of properties for listing upon the National Register of Historic Places. Properties listed upon the Register or found to be eligible for listing are considered to have significance as cultural resources. The criteria for evaluation are included in this document for information purposes.

National Register Criteria for Evaluation (36 CFR Part 60.4).

"The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association and:

- " (a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- " (b) That are associated with the lives of persons significant in our past; or
- " (c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- " (d) That have yielded, or may be likely to yield information important in prehistory or history...."

Criteria (a) and (b) pertain to locations whose value derives primarily from association with historical events or famous personages, and Criterion (c) relates to architectural entities. Criterion (d) pertains to archaeological sites that have a potential to inform substantively upon questions of archaeology or history, particularly if archaeological investigation is the primary or only means of realizing the potential gain. Obviously, substantive contributions to knowledge from archaeological investigations require both a viable theoretical framework and the survival of cultural data under conditions that would make their collection and interpretation intelligible. Archaeological situations lacking in either or both of these requisites are unlikely to hold much promise for increasing knowledge about past human behaviors.

For better or worse, the field conditions along most of the project alignment reflect a history of disturbance from a variety of sources; land-

clearing, farming, building construction and demolition, and so forth. These disturbances have scattered and fragmented the archaeological remains to the point that additional research is unlikely to be rewarded by a substantive gain in either data or information. This condition holds true for the Wingwall/Stone Barn (7-NC-A-81), the Thompson House (7-NC-A-82), the prehistoric site at 7-NC-A-3 (Locus B), and the prehistoric component at the Springer House (7-NC-A-80).

All of the grounds at the Springer House show intensive disturbances sufficient to rule out the probability that archaeological deposits have survived intact. However, based upon observations at similar sites in New Jersey (Mounier 1982, 1993), it is considered likely that archaeological deposits -- predating or coeval with the construction of the Springer House -- will be found sealed beneath a late 19th-century addition as well as beneath the original cellar floor pavement. This prediction is subject to validation, without which no warrant can be given that significant archaeological deposits are present. Because the house was occupied at the time of the present research, the locations of special interest could not be properly explored. In this sense, the evaluation of the Springer House as a cultural resource remains problematical. Additional testing of the indicated spaces should be conducted once the property has been vacated. The results of that testing would confirm or disallow the claim of significance for the site.

Summary and Conclusions

A Phase I/II Cultural Resource Survey undertaken in 1993 for the Delaware Department of Transportation (DelDOT). The project area included all locations subject to effects from proposed improvements to Valley Road (C.R. 294) between Route 7 (Limestone Road) and Route 41 (Old Lancaster Pike). Proposed road

improvements include the creation of wider travel lanes, shoulders, drainage features, and stormwater management areas.

The survey entailed documentary research, fieldwork, laboratory procedures, and reporting. The results of the investigation demonstrate occupation in the locale from aboriginal times to the present. Sampling involved the excavation of 329 test units (each about 12" in diameter) and 6 excavation units (of various size between 2½ x 5 feet and 5 x 5 feet). Fieldwork shows that most of the project area -- including locations that contain cultural remains -- has been disturbed by various perturbing agencies.

Four locations merited detailed examination at the Phase II level of survey. These locations include the Springer House (7NC-A-80), the Thompson House (7NC-A-82), Site 7NC-A-3 (Locus B), and the Wingwall/Stone Barn Site (7NC-A-81). Both the Springer House and the Thompson House have prehistoric as well as historic components. The Wingwall/Stone Barn site is part of a former agricultural complex, now demolished. The historic components date between the middle of the last century and the present. Site 7NC-A-3 (Locus B) is an extension of a previously identified prehistoric site.

The results of fieldwork demonstrate that none of the sites contain significant cultural resources within the locations subject to evaluation. At the Springer House, there remains a potential for archaeological materials and data to survive beneath the building, in locations that were inaccessible at the time of the this survey. Additional investigation to identify and evaluate such remains as might be present there is recommended. Elsewhere, no further work is required.

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--- End of List ---

Appendix I: Log of Test Units

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
1	0-32 32-41	PZ *	dark yellow-brown silt-loam yellow-brown silt-loam
2-4	---	--	---Same as No.1---
5	0-45	D	mixed plowzone, subsoil, loam
6	0-24	F	mixed fill, traprock, etc.
7	0-27	F	sod, very dark gray, traprock, macadam base
8	0-20 30	PZ *	--- Same as No.7 --- brown-yellow clay loam
9	---	--	--- Same as No.8---
10	0-50	D	dark yellow-brown silt-loam
11	0-54 54-56	PZ *	dark yellow-brown silt-loam brown-yellow clay loam
12	---	--	--- Same as No. 11 ---
13	0-18 18-50 50-52	F * *	dark yellow-brown dark yellow-brown/gray-brown silt-loam brown-yellow clay loam
14	0-18 18-59 59--64	F ? *	mixed fill mixed dark yellow-brown-gray organic earth mottled gray-brown-yellow-brown, wet soil
15	0-22 22-48 48-72	D/F -- --	mixed fill --- Same as No. 14 --- --- Same as No. 14 ---
16	0-39 30-45	PZ *	dark brown silt-loam, very dry mottled gray-yellow-brown sandy silt-loam
17	0-23 23-30	PZ *	dark yellow-brown silt-loam yellow-brown silt-loam/clay loam
18	---	--	--- Same as No. 17 ---

Key: PZ=Plowzone; D=Disturbed; F=Fill; *=Undisturbed; F/D=Filled or Disturbed;
PZ/F=Plowzone over Fill; F/PZ=Fill over Plowzone; D/PZ=Disturbance over Plowzone

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
19	---	--	--- Same as No. 17 ---
20	---	--	--- Same as No. 17 ---
21	---	PZ	--- Same as No. 17 ---
	---	*	--- Same as No. 17 ---
22	0-37	F	yellow-brown/reddish yellow/light gray silt-loam
	37-65	*	very dark gray silt-loam -- wetland soil
	65-82	*	light gray silt-loam w/ quartz grit and pebbles
23	0-10		yellow-brown silt-loam w/ quartz and traprock
24	0-20	D/F	mottled dark yellow-brown/brown-yellow silt-loam
	20-22	*	very dark gray silt-loam w/ iron leaching
25	0-11	F	mixed yellow-brown silt-loam
	11-16	F	reddish yellow coarse sandy loam
	16-23	PZ	yellow-brown silt-loam w/ sand grains
	23-25	*	brown-yellow and light gray silt-loam
26	0-20	F/D	dark brown/yellow-brown silt-loam w/ traprock
	20-38	PZ	dark gray-brown silt-loam -- remnant plowzone
	38-40	*	yellow-brown/gray-brown silt-loam
27	0-20	F	brown-yellow/yellow-brown silt-loam w/ traprock
	20-51	PZ	dark yellow-brown loam
	51-60	*	reddish brown silt-loam
28	0-19	F	brown-yellow/yellow-brown silt-loam w/ traprock
	19-34	PZ	dark yellow-brown and silt-loam
	34-38	*	reddish yellow-brown-yellow silt-loam
29	0-22	F/D	dark brown dark yellow-brown -- pavement impasse
30	0-22	F	dark yellow-brown compact silt-loam w/ traprock
	22-35	PZ	dark yellow-brown loam
	35-38	*	brown-yellow silt-loam
31	0-8	F/D	dark yellow-brown/brown compact silt-loam
	8-39	PZ	dark yellow-brown silt-loam
	39-50	*	yellow-brown/brown-yellow silt-loam, some clay
32	0-9	D	dark yellow-brown silt-loam w/ turf, dry
	9-30	PZ	dark yellow-brown silt-loam
	30-50	*	yellow-brown/brown-yellow silty clay loam
33	0-26	PZ	dark brown silt-loam
	26-42	*	reddish yellow/brown-yellow/silty clay loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
34	0-5	F	dark brown silt-loam
	5-24	F	mixed dark yellow-brown silt-loam
	24-32	F	yellow-brown silt-loam
	32-53	PZ	dark yellow-brown silt-loam, dry, soft
	53-61	*	yellow-brown/brown-yellow silt-loam
35	0-16	F	mixed yellow-brown silt-loam
	16-32	F	dark yellow-brown silt-loam
	32-65	F	dark brown/reddish yellow silt-loam w/ mortar and quartz chunks
36	0-30	PZ	dark yellow-brown silt-loam
	30-43	*	mottled brown-yellow silt-loam
37	0-37	PZ	dark yellow-brown silt
	37-48	*	mottled brown-yellow/yellow-brown silt-loam
38	0-30	PZ	dark yellow-brown silt-loam
	30-37	*	mottled brown-yellow/yellow-brown silt-loam
39	---	--	--- Same as No.38 ---
40	---	--	--- Same as No. 38 ---
41	0-38	PZ	--- Same as No. 38 ---
	38-47	*	--- Same as No. 38 ---
42	0-20	F	dark gray-brown silt-loam
	20-41	PZ	dark yellow-brown silt-loam
	41-48	*	yellow-brown/brown-yellow silt-loam w/ clay
43	0-17	F	mixed fill
	17-36	PZ	dark yellow-brown silt-loam
	36-41	*	yellow-brown/brown-yellow silt-loam
44	---	--	--- Same as No. 43 ---
45	0-33	PZ	--- Same as No. 43 ---
	33-37	*	--- Same as No. 43 ---
46	0-30	PZ	plowzone
	30-35	*	
47	---	--	--- Same as No. 46 ---
48	---	--	--- Same as No. 46 ---
49	0-7	F	--- Same as No.46 ---

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
	7-28	PZ	light yellow-brown silt-loam
50	0-35	PZ	--- Same as No. 46 ---
	35-40	*	--- Same as No. 46 ---
51	0-30	PZ	--- Same as No. 46 ---
	30-40	*	--- Same as No. 46 ---
52	0-53	PZ	--- Same as No. 46 ---
	53-60	*	--- Same as No. 46 ---
53	0-56	PZ	--- Same as No. 46 ---
	56-59	*	--- Same as No. 46 ---
54	0-42	PZ	dark gray-brown silt-loam
	42-45	*	yellow-brown/brown-yellow silt-loam w/ clay
55	0-30	F	dark yellow-brown silt-loam
	30-37	F	coal, ash, macadam layer, coarse
	37-55	F	brown-yellow silt-loam clay
	55-76	F	dark yellow-brown and mottled
	76-80	*	brown-yellow/yellowish red silty clay loam wet
56	0-23	F	dark yellow-brown dark gray-brown silt-loam
	23-60	F	brown-yellow/yellow-brown silt-loam w/ rocks
	60-64	*	yellow-brown/brown-yellow silty clay loam
57	0-29	F	dark yellow-brown silt-loam w/ brick bits
	29-	--	impasse
58	0-20	F	yellow-brown/dark yellow-brown silt-loam
	20-56	D/F	reddish yellow/red coarse silty clay loam
	56-66	PZ	dark yellow-brown silt-loam
	66-73	*	brown-yellow silty clay loam
59		F	--- Same as No.58 ---
		F	--- Same as No.58 ---
60	0-32	PZ	dark yellow-brown silt-loam packed
	32-35	*	yellow-brown/brown-yellow silt-loam
61	---	--	--- Same as No. 60 ---
62	0-50	PZ	--- Same as No. 60 ---
	50-55	*	--- Same as No. 60 ---
63	0-14	PZ	remnant
	14-56	*	reddish yellow/brown-yellow clay loam w/ quartz

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
64	0-43	PZ	Same as No. 63 w/ large pieces of quart
65	---	--	--- Same as No. 64 ---
66	---	--	--- Same as No. 64 ---
67	0-40 40-60 60-65	F PZ *	dark yellow-brown-gray-brown silt-loam dark yellow-brown silt-loam yellow-brown/brown-yellow silt-loam
68	0-6 6-14	F PZ	fill/turf dark yellow-brown silt-loam
69	0-20 20-30	PZ *	dark yellow-brown silt-loam yellow-brown and gray silty clay loam
70	0-20 20-30	PZ *	mixed dark yellow-brown loam yellow-brown and gray silty clay loam
71	---	--	--- Same as No. 70 ---
72	0-10 10-20	PZ *	dark yellow-brown silt-loam yellow-brown and gray silty clay loam
73	0-10 10-19 19-27	F D *	very dark reddish-brown silt-loam dark yellow-brown and yellow-brown silt-loam yellow-brown/brown-yellow/gary-yellow clay loam
74	0-18 18-25	D/F *	topsoil as above w/ plowzone mixed yellow-brown/light brown loam w/ iron leached
75	---	--	--- Same as No. 69 ---
76	0-20 20-23 23-30	PZ D *	dark yellow-brown silt-loam dark yellow-brown/brown-yellow loam yellow-brown/brown-yellow clay loam w/ rocks
77	0-10 10-20	PZ *	brown-yellow/yellow-brown silt-loam yellow-brown/brown-yellow clay loam w/ quartz
78	0-10 10-20	PZ *	dark yellow-brown silty loam yellow-brown silty clay loam
79	0-10 10-20	PZ *	dark yellow-brown silt-loam mottled yellow-brown/light gray-brown loam, dry
80	---	--	--- Same as No. 79 ---
81	---	--	--- Same as No. 79 ---

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
82	---	--	--- Same as No. 79 ---
83	0-40 40-45	D/F *	mixed brown-yellow/yellow-brown silt-loam yellow-brown silt-loam
84	---	--	--- Same as No. 83 ---
85	0-10 10-26 26-30	F * *	topsoil reddish yellow/ silty clay loam reddish yellow silty clay loam w/limestone
86	0-36 36-41 41-45	F D/F *	dark yellow-brown/gray-brown silt w/ limestone buried turf/dark yellow-brown silt-loam reddish yellow coarse silty clay loam
87	0-20 20-34	PZ *	dark yellow-brown/yellow-brown mottled light gray/light gray-brown silt-loam
88	0-10 10-21 21-40 40-	F F PZ --	dark yellow-brown silt-loam dark yellow-brown silt-loam w/ schist, quartz yellow-brown/dark gray-brown micaceous silt-loam impasse/rock
89	0-16 16-25	F *	dark yellow-brown silt-loam yellow-brown/dark yellow silty clay loam
90	0-12 12-18	F *	dark yellow-brown silty loam yellow-brown/brown-yellow silty loam
91	0-18 18-28	F/PZ *	dark yellow-brown silt-loam reddish yellow silty clay loam
92	0-23 23-28	F *	dark yellow-brown silty loam reddish yellow silty clay loam, quartz grit
93	---	--	--- Same as No. 92 ---
94	0-40	F	mottled dark yellow-brown fill - impasse
95	0-23 23-48 48-55	F PZ *	dark gray-brown silt-loam dark yellow-brown silt-loam yellow-brown silty clay loam
96	0-10 10-21 21-30	F PZ *	dark yellow-brown silt-loam dark yellow-brown silt-loam yellow-brown silty clay loam
97	0-11	F	dark yellow-brown silt-loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
	11-37	PZ	dark yellow-brown silt-loam
	37-44	*	yellow-brown silty clay loam
98	0-27	*	dark gray-brown silt-loam wet
	27-60	W	yellow-brown/gray-brown silt-loam, water @ 60 cm
99	0-25	PZ	dark gray-brown/brown-yellow loam
	25--30	*	yellow loamy clay
100	0-55	PZ	dark yellow-brown silt-loam
	55-60	*	yellow-brown silty clay loam
101	0-30	F	dark gray-brown silt-loam
	30--53	PZ	dark yellow-brown silt-loam
	53-60	*	yellow-brown silt-loam
102	0-41	PZ	dark yellow-brown silt-loam
	41-46	*	yellow-brown silt-loam
103	0-22	F	dark yellow-brown/brown silt-loam
	22-54	F	dark gray-brown silt-loam
	54-58	*	marbled gray-brown silt-loam - wetland soil
104	0-22	PZ	dark yellow-brown silt-loam
	22-30	*	yellow-brown silt-loam
105	0-29	D/F	dark yellow-brown silt-loam
	29-32	*	yellow-brown silt-loam
106	0-20	D/F	dark yellow-brown/gray-brown loam w/ schist, impasse
107	0-14	F	dark gray-brown silt-loam
	14-25	PZ/D	dark yellow-brown/yellow-brown silt-loam
	25-33	*	yellow-brown silt-loam
108	0-16	F	dark gray-brown silt-loam
	16-24	F	yellow-brown/dark yellow-brown silt-loam
	24-40	PZ/?	yellow-brown/dark yellow-brown silt-loam
	40-43	*	yellow-brown/brown-yellow silt-loam
109	0-10	F	dark yellow-brown silt-loam
	10-23	F	dark gray loam, ash, brick, rock
	23-40	F	mixed dark yellow-brown/yellow-brown silt-loam
	40-45	*	yellow-brown silty clay loam w/ quartz
110	0-32	PZ	dark yellow-brown silt-loam
	32-35	*	yellow-brown silty clay loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
111	0-24	PZ	dark yellow-brown silt-loam - loose
	24-43	*	yellow-brown silty clay loam
	43-48	*	yellow-brown silty clay loam - compact
112	0-28	PZ	dark yellow-brown silt-loam
	28-35	*	yellow-brown silt-loam - compact
113	0-15	F	dark gray-brown silt-loam
	15-36	PZ	dark yellow-brown silt-loam
	36-40	*	yellow-brown silty clay loam
114	0-15	F/PZ	dark yellow-brown silt-loam w/ quartz rocks, impasse
115	0-14	F	dark yellow-brown silt-loam - quartz schist
	14-32	PZ	dark yellow-brown silt-loam
	32-38	*	yellow-brown silty clay loam
116	0-11	F	dark brown silt-loam
	11-21	F	yellow-brown silt-loam w/ coal slag
	21-35	PZ	dark yellow-brown silt-loam
	35-41	*	yellow-brown silty clay loam
117	0-10	F	dark yellow-brown silt-loam
	10-28	F	coarse reddish yellow silt-loam w/ quartz
	28-47	PZ	dark yellow-brown/dark brown silt-loam
	47-55	*	yellow-brown silty clay loam
118	0-13	F	dark gray-brown silt-loam
	13-26	*	brown/yellow-brown micaceous loam
	26-35	*	marbled gray-brown/yellow-brown silt-loam
119	0-38	PZ/D	dark yellow-brown silt-loam
	38--60	D	tree-disturbed, dark yellow-brown loam--impasse
120	0-17	F/PZ	dark yellow-brown silt-loam
	17-30	*	yellow-brown silt-loam
121	0-18	F	dark yellow-brown silt-loam
	18-62	D	mixed dark yellow-brown, yellow-brown silt-loam
122	0-32	PZ	dark yellow-brown silt-loam
	32-41	*	yellow-brown silt-loam
123	---	--	--- Same as No. 122 ---
124	0-37	PZ	dark yellow-brown silt-loam
	37-46	*	yellow-brown silt-loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
125	0-10	D/F	dark gray-brown silt-loam
	10-15	F	yellow-brown silty clay loam
	15-45	F/D	dark yellow-brown/yellow-brown silty clay loam
126	0-13	F	dark yellow-brown/yellow-brown silt-loam
	13-62	F	dark yellow-brown silt-loam w/ trap rock
127	0-6	F	dark gray-brown silt-loam
	6-38	PZ/F	dark yellow-brown silt-loam w/ quartz rock
	38-45	*	yellow-brown/brown-yellow silty clay loam
128	0-25	F	mixed fill: traprock, ash, yellow-brown loam
	25-38	PZ	dark yellow-brown silt-loam
	38-44	*	yellow-brown/brown-yellow silty clay loam
129	0-56	F	mixed fill/ trap
130	0-40	F	mixed fill
	40-56	?	black silt-loam, organic
	56-	?	layered dark gray/yellow-brown silty clay loam
131	0-65	F	mixed/rocky
	65-70	*	dark gray/black silt-loam -- old wetland surface
132	0-30	D/F	dark gray-brown silt-loam, micaceous
	30-50	*/W	gray/dark yellow-brown loam w/ iron mottles
133	0-20	F	dark gray-brown micaceous silty clay loam
	20-44	PZ	dark yellow-brown loam
	44-50	*	mottled gray/reddish yellow silty clay loam
134	0-15	?	dark yellow-brown silty loam
	15-40	PZ	mottled light yellow-brown
	40-46	*	mottled yellow-brown/light gray-brown silt-loam
135	0-27	PZ	dark yellow-brown/orange loam - impasse of roots
136	0-16	F	dark gray loam
	16-42	PZ	dark yellow-brown loam w/ limestone and quartz
137	0-68	F	dark yellow-brown silt-loam - impasse
138	0-17	F/PZ	dark gray-brown silt-loam w/ traprock
	17-39	PZ	dark yellow-brown silt-loam
	39-44	*	yellow-brown silt-loam
139	0-22	PZ	dark yellow-brown silt-loam
	22-30	*	yellow-brown silt-loam
140	---	--	--- Same as No. 139 ---

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
141	---	--	--- Same as No. 139 ---
142	0-10 10-30 30-34	F PZ *	dark yellow-brown silt-loam dark yellow-brown yellow-brown silt-loam
143	---	--	--- Same as No. 142 ---
144	0-13 13-32 32-38	F PZ *	dark yellow-brown micaceous silt-loam dark yellow-brown silt-loam yellow-brown silt-loam
145	0-9 9-	PZ *	dark yellow-brown silt-loam yellow-brown silt-loam
146	0-10 10-37 37-44	F PZ *	mixed dark gray/yellow-brown silt-loam dark yellow-brown silt-loam yellow-brown silt-loam
147	0-10 10-34 34-37	F PZ *	dark yellow-brown/dark gray-brown silt-loam dark yellow-brown silt-loam yellow-brown silt-loam
148	---	--	--- Same as No. 147 ---
149	0-8 8-40 40-48	F PZ *	dark yellow-brown/dark gray-brown silt-loam dark yellow-brown silt-loam yellow-brown silt-loam
150	0-20 20-25	PZ *	dark yellow-brown silt-loam yellow-brown silt-loam
151	---	--	--- Same as No. 150 ---
152	0-46 46-53	F *	dark yellow-brown silt-loam - wet yellow-brown/brown-yellow silt-loam
153	0-28 28-53	PZ *	dark yellow-brown silt-loam yellow-brown silt-loam
154	0-55 55-63	PZ *	dark yellow-brown silt-loam yellow-brown silt-loam
155	0-22 22-28	PZ *	dark yellow-brown silt-loam yellow-brown silt-loam
156	0-37 37-46	PZ *	dark yellow-brown silt-loam yellow-brown silt-loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
157	0-18	F	dark yellow-brown/dark gray-brown silt-loam
	18-40	PZ	dark yellow-brown silt-loam
	40-50	*	yellow-brown/brown-yellow silt-loam
158	0-32	PZ	dark yellow-brown silt-loam
	32-39	*	yellow-brown silt-loam
159	0-25	PZ	dark yellow-brown silt-loam
	25-31	*	silty clay loam
160	---	--	--- Same as No. 158 ---
161	0-30	F	dark gray-brown
	30-53	PZ	dark yellow-brown
	53-57	*	yellow-brown/brown-yellow silty clay loam
162	0-20	F	medium brown loam
	20-45	PZ	brown-yellow loam
	45-53	*	yellow-brown loam
163	0-23	F	gray-brown loam
	23-36	PZ	brown-yellow mottled loam
	36-41	*	strong yellow-brown loam, sticky
164	0-30	F	mixed brown-yellow loam
	30-40	F	dark yellow/orange micaceous schist w/ gravel
165	0-20	F/PZ	brown-yellow loam
	20-30	*	dark yellow-brown micaceous silt-loam
166	0-20	F	mottled brown loam
	20-86	F	light gray-brown schistose loam
167	0-13	F	dark gray-brown loam
	13-36	PZ	brown-yellow loam
	36-50	*	brown-yellow/yellow-brown loam w/ organic matter
168	0-30	F	ash, coal, refuse (late 19th- early 20th C)
	30-40	PZ	brown-yellow schistose loam/weathered quartz
	40-53	*	yellow-brown loam
169	0-34	F/PZ	gray-brown/brown-yellow loam
	34-49	*	yellow-brown loam
170	---	--	--- Same as No. 169 ---
171	---	--	--- Same as No. 169 ---
172	0-25	F	mixed coal, ash, shell, and brick

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
	25-46	PZ	medium brown-yellow loam
	46-56	*	yellow-brown loam
173	0-10	F	brown loam w/ road paving debris
	10-26	PZ	brown-yellow loam
	26-36	*	yellow-brown loam
174	0-22	PZ	truncated brown-yellow loam w/ road wash
	22-30	*	compact yellow-brown clay loam
175	---	--	--- Same as No. 174 ---
176	---	--	--- Same as No. 174 ---
177	0-30	F/PZ	brown-yellow loam w/ road wash
	30-40	*	yellow-brown loam
178	0-33	PZ	light brown/brown-yellow loam w/ coal, glass
	33-43	*	light yellow-brown loam
179	---	--	--- Same as No. 178 ---
180	---	--	--- Same as No. 178 ---
181	---	--	--- Same as No. 178 ---
182	---	--	--- Same as No. 178 ---
183	---	--	--- Same as No. 178 ---
184	---	--	--- Same as No. 178 ---
185	0-15	F	dark brown loam turf w/ aggregate
	15-35	PZ	brown-yellow loam
	35-42	*	light yellow/yellow-brown loam
186	0-30	PZ	light brown/brown-yellow compact loam
	30-36	*	stiff yellow-brown loam
187	0-27	PZ	light brown/brown-yellow compact loam
	27-35	*	stiff yellow-brown loam
188	0-33	PZ	light brown/brown-yellow compact loam
	33-45	*	stiff yellow-brown loam
189	---	--	--- Same as No. 187 ---
190	---	--	--- Same as No. 187 ---

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
191	0-20 20-30	PZ *	light brown-yellow loam strong yellow loam, micaceous/limestone
192	0-26 26-on	PZ *	light brown yellow loam strong yellow loam w/ weathered limestone
193	0-32 32-42	PZ *	light brown-yellow loam yellow-brown loam
194	---	--	--- Same as No. 193 ---
195	---	--	--- Same as No. 193 ---
196	---	--	--- Same as No. 193 ---
197	---	--	--- Same as No. 193 ---
198	0-18 18-50 50-on	F F *	dark gray-brown loam mottled yellow-brown/brown yellow micaceous loam truncated yellow-brown sticky loam
199	0-52	F/D	mixed gray-brown/yellow-brown fill dirt
200	0-20 20-50 50-70	F F F	mixed gray-brown loam fill yellow micaceous loam dark gray-brown mottled loam
201	0-18 18-35	PZ *	gray-brown loam strong yellow-brown loam
202	0-22 22-40	PZ *	gray-brown/brown loam (coal,ash,shell,glass) yellow-brown loam
203	---	--	--- Same as No. 202 ---
204	0-22 22-32	PZ *	brown-yellow loam mottled gray yellow-brown loam
205	---	--	--- Same as No. 204 ---
206	---	--	--- Same as No. 201 ---
207	0-32	F	mottled gray-brown loam w/ historic fill
208	0-20 20-30	F *	mottled ash, coal, nails, etc. truncated strong yellow-brown loam
209	0-26 26-30	PZ *	gray-brown loam strong yellow-brown loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
210	---	--	--- Same as No. 209 ---
211	0-63 63-80	F F	mixed 20th C. glass, ash, metals mottled yellow gray micaceous loam
212	---	--	--- Same as No. 207 ---
213	---	--	--- Same as No. 207 ---
214	---	--	--- Same as No. 204 ---
215	---	--	--- Same as No. 204 ---
216	0-24 24-37	PZ *	brown-yellow loam yellow-brown loam compact
217	0-28 28-35	PZ *	dark brown-gray/brown-yellow loam compact yellow-brown loam
218	0-22 22-30	PZ *	brown-yellow loam yellow-brown loam
219	---	--	--- Same as No. 218 ---
220	---	--	--- Same as No. 218 ---
221	0-15 15-25	PZ *	gray-brown/yellow-brown loam mottled light gray/yellow-brown loam
222	---	--	--- Same as No. 204 ---
223	0-28 28-34	PZ *	gray-brown/brown-yellow loam mottled light gray/yellow-brown loam
224	0-26 26-34	PZ *	gray-brown/brown-yellow loam mottled light gray yellow-brown loam
225	---	--	--- Same as No. 224 ---
226	---	--	--- Same as No. 224 ---
227	---	--	--- Same as No. 224 ---
228	---	--	--- Same as No. 224 ---
229	0-25 25-35	PZ *	brown loam strong yellow-brown loam
230	---	--	--- Same as No. 229 ---

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
231	0-20 20-24	PZ *	truncated brown-yellow loam --- Same as above ---
232	---	--	--- Same as No. 204 ---
233	---	--	--- Same as No. 204 ---
234	0-40 40-50	PZ *	mixed yellow-brown/brown-yellow loam mottled gray/brown/yellow loamy sand
235	0-28 28-34	PZ *	brown-yellow loam mottled gray yellow-brown loam
236	---	--	--- Same as No. 235 ---
237	---	--	--- Same as No. 235 ---
238	---	--	--- Same as No. 224 ---
239	---	--	--- Same as No. 231 ---
240	---	--	--- Same as No. 231 ---
241	0-10 10-60 60-70	F PZ/F *	dark gray-brown loam w/ road-wash debris dark brown loam w/ glass, ash, etc. mottled yellow-brown/orange-gray loam, wetland soil
242	---	--	--- Same as No. 241 ---
243	0-18 18-50 50-60 60-70	F F F/PZ *	turf/road wash very dark loam, gravel, ash, glass brown-yellow loam mottled yellow-brown/gray-orange loam, wetland soil
244	---	--	--- Same as No. 243 ---
245	0-33 33-45	F/PZ *	dark brown/brown-yellow loam mottled yellow-brown loam
246	0-20 20-32	F/PZ *	brown-yellow loam yellow-brown loam
247	0-12 12-28 28-37	F PZ *	mixed brown/yellow-brown loam w/ turf medium brown-yellow loam strong yellow-brown compact loam
248	0-10	F	medium brown loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
	10-20	*	truncated strong yellow-brown/orange micaceous loam
249	---	--	--- Same as No. 248 ---
250	---	--	--- Same as No. 248 ---
251	---	--	--- Same as No. 248 ---
252	---	--	--- Same as No. 248 ---
253	0-25 25-35	F *	mixed soils mottled yellow-brown orange loam, truncated
254	0-12 12-30 30-40	F PZ *	dark brown loam/gravel medium brown/brown-yellow loam mottled yellow-brown/strong yellow/light gray loam
255	---	--	--- Same as No. 254 ---
256	---	--	--- Same as No. 254 ---
257	---	--	--- Same as No. 254 ---
258	0-35 35-40	F/PZ *	mixed dark brown/brown-yellow loam compact mottled yellow-brown/orange
259	---	--	--- Same as No. 258 ---
260	0-18 18-24	PZ *	medium brown loam compact mottled yellow/light gray-brown loam
261	---	--	--- Same as No. 260 ---
262	0-34 34-40	PZ *	gray-brown/medium brown-yellow loam compact yellow-brown loam w/ weathered quartz
263	0-33 33-50 50-60	F PZ *	loose gray-brown/brown loam light brown-yellow loam compact strong yellow-brown loam
264	---	--	--- Same as No. 263 ---
265	---	--	--- Same as No. 264 ---
266	0-60	F	mixed mottled gray green brown loamy fill
267	0-12	F	dark gray-brown loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
	12-30	PZ	mottled dark brown loam
	30-40	*	ashy grayish light brown loam
268	0-10	F	dark gray-brown loam
	10-40	F	mixed orange brown/gray loam
	40--	*	mottled light gray/yellow-orange loam
269	0-8	F	dark gray-brown loam, applied topsoil
	8-35	PZ	medium brown loam
	35-60	PZ	medium brown-yellow loam
270	0-16	F	turf dark gray-brown loam
	16-42	PZ	medium brown loam
	42-55	*	medium gray loam
271	0-24	PZ/F	dark gray-brown/brown-yellow loam
	24-35	*	compact yellow-brown loam
272	---	--	--- Same as No. 271 ---
273	0-30	F/PZ	dark gray-brown/brown-yellow loam
	30-39	*	mottled, compact yellow-brown/gray mottled loam
274	0-15	F	turf dark gray-brown
	15-45	F	mixed schistose fills
275	0-40	PZ	gray-brown/brown-yellow loam
	40-50	*	yellow-brown mottled loam
276	0-35	PZ	--- Same as No. 275 ---
	35-40	*	--- Same as No. 275 ---
277	0-28	PZ/F	medium brown/brown-yellow loam
	28-40	*	yellow-brown loam
278	---	--	--- Same as No. 277 ---
279	0-32	F/PZ	--- Same as No. 277 ---
	32-39	*	--- Same as No. 277 ---
280	0-30	F/PZ	medium brown loam - road debris
	30-50	F	dark gray-brown loam w/ cinders, traprock ,etc.
	50-100	F	strong yellow-brown micaceous loam
281	0-15	F	mixed micaceous loam w/ traprock
	15-55	F	mottled yellow-brown loam
282	0-25	F	gray-brown loam - road debris
	25-70	F	micaceous loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
283	0-80	F	mixed brown/dark brown loam
284	0-20	F	dark gray-brown loam w/ ash, coal, brick, glass
	20-50	PZ	medium brown loam
	50-60	*	light brown-yellow loam
285	0-30	F/PZ	medium brown loam- glass,ash,brick
	30-40	*	compact yellow-brown loam
286	0-22	F/PZ	medium brown-yellow loam
	22-32	*	compact yellow-brown loam
287	0-40	F/PZ	medium brown/brown-yellow loam
	40-50	*	yellow-brown micaceous loam
288	0-28	F/PZ	brown-yellow loam
	28-34	*	yellow-brown loam
289	0-35	F/PZ	brown loam
	35-45	*	light brown-yellow/orange mottled loam
	45-52	*	dark gray w/ orange brown wetland loam
290	0-34	F/PZ	brown loam
	34-42	*	mottled dark gray-brown loam
291	0-50	F/PZ	--- Same as No. 290 ---
	50-60	*	--- Same as No. 290 ---
292	0-40	F/PZ	--- Same as No. 290 ---
	40-45	*	--- Same as No. 290 ---
293	0-28	F/PZ	light/medium brown loam
	28-35	*	compact yellow-brown loam
294	0-50	F/PZ	medium brown ashy brown loam
	50-55	*	compact yellow-brown loam
295	---	--	--- Same as No. 294 ---
296	0-70	F	strong yellow-brown orange micaceous loam
	70-107	F	medium dark brown micaceous loam
297	0-40	F	strong yellow-brown orange brown micaceous loam
	40-75	PZ	dark brown micaceous loam
	75-90	*	light mottled yellow gray-brown micaceous loam
298	0-43	F/PZ	dark brown micaceous loam
	43-53	*	light mottled yellow-brown/gray micaceous loam

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
299	0-25	F	mixed micaceous loam
	25-46	PZ	dark brown micaceous loam
	46-53	*	light yellow-brown micaceous loam
300	0-15	F/D	mixed yellow-brown loam
	15-20	*	truncated yellow-brown loam
301	0-26	F/PZ	disturbed fill schist gray-brown
	26-37	PZ/F	medium dark brown micaceous loam
	37-43	*	light yellow-brown loam
302	0-17	D/F	gray-brown schist fill
	17-26	F	dark gray packed surface
	26-46	PZ	medium brown loam
	46-53	*	yellow-brown loam
303	0-16	F	very dark gray - coal
	16-36	PZ	brown-yellow loam - glass, coal
	36-43	*	light yellow-brown loam
304	0-20	F/D	mixed gray-brown/yellow-brown loamy fill
	20-43	PZ	medium brown loam
	43-53	*	compact light yellow-brown loam
305	0-67	PZ/F	mixed micaceous gray-brown/brown loams
	67-		impasse
306	0-12	D/F	mixed gray-brown loams
	12-32	PZ	medium brown-yellow loam
	32-39	*	light yellow-brown loam
307	0-10	F	--- Same as No. 286 ---
	10-30	F	--- Same as No. 286 ---
	30-48	PZ	--- Same as No. 286 ---
	48-57	*	--- Same as No. 286 ---
308	0-40	PZ/D	gray-brown/medium brown loam
	40-48	*	compact orange brown loam
309	0-22	PZ	medium brown loam
	22-30	*	orange yellow-brown micaceous loam
310	---	--	--- Same as No. 309 ---
311	0-30	PZ	--- Same as No. 309 ---
	30-35	*	--- Same as No. 309 ---
312	---	--	--- Same as No. 311 ---

<u>Unit</u>	<u>Depth (cm)</u>	<u>Code</u>	<u>Description</u>
313	---	--	--- Same as No. 311 ---
314	---	--	--- Same as No. 311 ---
315	0-16 16-36 36-48	F PZ *	mixed brown loam w/ building debris brown-yellow micaceous loam yellow-brown loam
316	0-22 22-45	F/D *	brown silty loam w/ shell lens yellow-brown loam
317	0-20 20-50	F/D *	medium brown loam yellow-brown loam
318	0-40	F	mixed loam w/ debris
319	0-17 17-50	F/D *	medium brown silty loam yellow-brown silty loam
320	0-13 13-45	F/D *	medium brown silty loam yellow-brown silty loam
321	0-20 20-30	F/D *	brown silty loam very hard yellow-brown loam w/ glass @ surface
322	---	--	--- Same as No. 320 ---
323	0-26 26-40	D/F *	medium gray-brown/brown-yellow silty loam yellow-brown loam
324	---	--	--- Same as No. 323 ---
325	0-10 10-26 26-48	F D/PZ *	dark brown-gray w/ ash, coal, glass fragments medium brown silty loam yellow-brown silty loam
326	0-80	F	mixed building rubble/soil fill
327	0-23 23-45	F *	dark gray-brown silty loam yellow-brown silty loam
328	0-25 25-35	F *	mixed brown/brown-yellow silty loam compact yellow-brown micaceous silty loam
329	0-12 12-45	F/D *	medium gray-brown silty loam light yellow-brown silty loam

--- End of Log ---

Appendix II: Artifact Inventory

Test Units

<u>Unit No.</u>	<u>Depth (cm)/ Provenience</u>	<u>Culled</u>	<u>f</u>	<u>Item</u>
Springer House Site (7NC-A-80)				
034	PZ	Y	1	milk-glass fragment
035	PZ		1	quartz reduction fragment
036	PZ	Y	1	clear glass fragment
	PZ	Y	1	mammal long bone, unidentified
037	PZ		1	redware, manganese oxide, lead glaze
041	PZ-Fill		1	quartz biface fragment
042	PZ-Fill		1	quartz flake fragment
047	0-35		2	redware, lead glaze, manganese oxide slip
049	PZ		1	whiteware, miscellaneous
	PZ	Y	1	bone fragment, unidentified
	PZ		2	redware sherds manganese oxide/lead glaze
052	PZ-53	Y	1	brick fragment
	PZ-53		3	redware sherds, manganese oxide/lead glaze
053	PZ-53		1	white/pearlware, blue underglaze
054	PZ		2	whiteware fragments
	"		1	clear glass, hollowware fragment
055	30-37	Y	1	whiteware sherd, miscellaneous
	"	Y	2	clear glass hollowware fragments
	"		1	zinc canning jar lid w/ glass liner (6 pcs.)
	"	Y	1	cut nail
	"	Y	2	window glass fragments
056	PZ		1	redware, undecorated, lead glaze
	"	Y	1	roof slate fragment
058	Fill	Y	2	bone fragments

Thompson Farm Site (7NC-A-82)

171	PZ		1	quartz flake fragment
177	PZ-30		1	redware, manganese oxide or lead glaze
207	PZ-32		2	teeth, incisors, hog and dog
215	PZ		1	sandstone, thermally altered
218	PZ		1	quartz flake fragment
219	PZ		1	quartz flake fragment
229	PZ-25		1	sherd, Riggins Fabric Impressed
230	PZ-25		1	jasper early stage flake fragment
237	PZ	Y	1	lead bullet, .30 Cal.
315	Fill		4	yellow earthenware, lead glaze
319	Fill		3	cut nails
	"		4	whiteware, pattern molded, glazed
	"		1	hollowware glass, brown

<u>Unit No.</u>	<u>Depth (cm)/ Provenience</u>	<u>Culled</u>	<u>f</u>	<u>Item</u>
319	Fill		1	hollowware glass, green
321	PZ-30		1	hand forged nail
	"		2	cut nails
	"		1	hand made clay ball, marble (?)
325	PZ-26		3	redware, manganese oxide/lead glaze
	"		1	cast iron vessel foot
327	PZ-23	Y	1	miscellaneous mammal bone, cut
	"	Y	1	miscellaneous poultry bone
329	Fill		1	hand forged nail/spike
329	"		1	iron fastening, unidentified

Prehistoric Site (7NC-A-3, Locus B)

288	PZ-28		1	quartzite, thermally altered
294	PZ-52	Y	1	shotgun shell brass, "UMC CO. 12 G. CLUB"
295	PZ-50	Y	1	tooth molar, mammal-horse/pig
308	PZ-40		1	quartz, thermally altered
	"		1	quartz reduction fragment
309	PZ-22		1	schist reduction fragment
310	PZ-22		1	quartz, thermally altered
	"		1	quartz reduction fragment
311	PZ-30		1	quartz core/reduction fragment
312	PZ-30		1	quartz core/reduction fragment
314	PZ-30		1	quartzite late stage flake

Non-Site Finds

083	Fill	Y	6	glass fragments, clear
	"	Y	1	glass fragment, brown
	"	Y	1	cut nail
089	Fill		1	yellow earthenware with rose slip
	"	Y	1	bone, mammal rib
	"	Y	1	brick fragment
091	0-8		1	four-hole button, rubber
	0-8		1	brass washer
093	0-25		1	Newark jasper primary flake fragment
094	0-27		1	large cut nail/spike
	"	Y	1	bone fragment
	"		3	whiteware sherds
113	0-15		2	quartz reduction fragments
119	PZ	Y	2	brick fragments
121	Fill	Y	1	brick fragment
	"	Y	2	iron nails, unidentified
122	PZ-32		1	redware, lead glaze, slip decorated
124	PZ-37	Y	1	brick fragment
	"	Y	1	clear glass fragment

<u>Unit No.</u>	<u>Depth (cm)/ Provenience</u>	<u>Culled</u>	<u>f</u>	<u>Item</u>
125	0-15		1	quartz flake fragment
144	13-32		1	quartz primary or thinning flake
146	PZ-37		1	hollowware fragment, green glass
	"		2	cut nails
147	PZ-34		1	window glass, green
	"		3	white/pearlware, blue underglaze decoration
	"		1	cut nail
	"		4	sherds miscellaneous whiteware
	"		2	green bottle glass fragment
156	PZ-37		2	whiteware fragments
157	PZ-40	Y	1	brick fragment
	"	Y	1	plaster fragment
	"	Y	1	bone fragment, unidentified
277	PZ-28		1	redware, lead glaze slip decorated (3 pcs.)

Excavation Units

<u>Unit No.</u>	<u>Depth (cm.)</u>	<u>Culled</u>	<u>f</u>	<u>Item</u>
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Locus I: Springer House (7NC-A-80)

I-1	0-8		1	Lincoln cent, 1958
	"		1	Lincoln cent, 1966
	"	Y	1	buss fuse, electrical
	"	Y	1	roof slate
	"		9	whiteware, undecorated
	"	Y	7	whiteware glazed tile fragments
	"	Y	2	sherds, misc. porcelain
	"		2	whiteware, hand painted
	"	Y	5	redware, modern flowerpot
	"	Y	7	window glass
	"	Y	1	plate glass fragment
	"	Y	2	hollowware glass, brown
	"	Y	5	hollowware glass, clear
	"	Y	1	hollowware glass, blue
	"	Y	2	hollowware glass, enameled
	"	Y	2	cut nails
I-1	0-8	Y	1	wire nail
	"	Y	3	bone sections-ham
	"	Y	6	bone fragments, pieces-poultry
	"	Y	2	bones, rib, chop, neck (pork?)
	"	Y	1	bone, small mammal/rodent

<u>Unit</u> <u>No.</u>	<u>Depth</u> <u>(cm.)</u>	<u>Culled</u>	<u>f</u>	<u>Item</u>
I-1	8-23		1	1880 Indian Head cent
	"		1	brass garment buckle, 19th century
	"		1	button, 4 hole, milk-glass
	"		1	marble
	"		1	pearlware, "sprig" decorated
	"		1	insulator fragment, porcelain
	"		3	molded whiteware-wheat pattern
	"		8	whiteware sherds, undecorated
	"		1	white porcelain bowl fragment
	"		2	pearlware, blue underglaze-flow-blue
	"		1	zinc jar closure fragment
	"		11	cut nails
	"		1	unidentified nail
	"		1	hand forged hook
	"		1	hand forged clasp
	"		1	brass stud
	"		2	glass fragments preserve jar, aqua,
	"		1	glass fragment, brown hollowware
	"		1	glass fragment, lamp chimney, clear
	"		2	glass fragments, fluted neck, pickle jar
	"		1	glass fragment, strap sided spirit bottle
	"		2	glass fragment, preserve jar, clear
	"		1	glass fragment, bottle neck, clear
	"		13	glass fragments, hollowware clear
	"		5	glass fragments, embossed bottle, aqua
	"		1	glass fragment, aqua
	"	Y	2	redware sherds-flower pot modern
	"	Y	2	brick fragments
	"	Y	2	roof slate fragments
	"		9	glass fragments window
	"	Y	11	bone fragments, rib/long bone, pig/cow, etc.
	"	Y	14	miscellaneous bone fragments, unidentified
	"	Y	19	miscellaneous bone fragments, poultry(?)
	"	Y	1	miscellaneous bone fragment, cat mandible(?)
	"	Y	5	miscellaneous bone fragments, rodents(?)
I-1	23-32		1	spongeware, white/blue underglaze decoration
	"		2	whiteware, miscellaneous
	"		1	kaolin pipe bowl fragment, 19th century
I-1	23-32		1	free blown aqua bottle neck
	"		5	small glass fragments, unidentified
	"		1	button, metal clad copper base
	"	Y	1	cut nail, lath
	"	Y	1	roof slate fragment
	"	Y	1	brick fragment

<u>Unit No.</u>	<u>Depth (cm.)</u>	<u>Culled</u>	<u>f</u>	<u>Item</u>
I-2	0-8		1	glass marble
	"		3	redware manganese oxide/lead glaze
	"		1	preserve jar fragment rim, ground
	"		3	zinc jar closure fragments
	"		14	window glass fragments, green
	"		4	hollowware glass fragments, clear
	"	Y	1	hollowware glass fragment, brown
	"	Y	1	etched glass tumbler fragment, modern
	"	Y	2	plate glass fragments, clear
	"	Y	7	roof slate fragments
	"	Y	4	redware flower pot fragments, modern
	"	Y	1	brick fragment
	"		7	cut nails
	"	Y	1	wire nail
	"	Y	2	screws, modern
	"	Y	1	electric box metal knock-out
	"		1	iron shutter pintle
	"		2	iron fragments, miscellaneous bar stock
	"		16	bone fragments, unidentified
	"	Y	1	shell, quahog, hinge fragment
I-2	8-23		1	redware, manganese oxide/lead glaze
	"		1	preserve jar fragment rim, ground
	"		4	hollowware glass fragments
	"	Y	7	window glass fragments
	"	Y	2	cut nails
	"	Y	2	brick fragments
	"	Y	2	roof slate fragments
	"	Y	3	redware flower pot fragments, modern
	"	Y	2	bone fragments, unidentified
	"		2	quartz flake fragments
I-3	0-28		1	whiteware, blue underglaze decoration
	"		2	whiteware, miscellaneous
	"	Y	6	window glass fragments
	"	Y	1	hollowware fragment, clear
	"	Y	6	cut nails
	"	Y	5	wire nails
	"	Y	2	roof slate fragments
I-3	0-28	Y	3	brick fragments
	"		1	quartz early stage biface fragment
	"		1	jasper biface fragment (triangle, basal ear)
	"		3	quartz primary flakes
	"		3	quartz thinning flake fragments
	"		1	quartz late stage flake
	"		11	quartz flake fragments
	"		2	quartz reduction fragments
	"		1	quartz, thermally altered

<u>Unit No.</u>	<u>Depth (cm.)</u>	<u>Culled</u>	<u>f</u>	<u>Item</u>
I-3	0-28		1	quartzite primary flake fragment
	"		1	felsite primary flake fragment
	"		1	jasper thinning flake fragment
I-3	28-48		1	whiteware sherd, miscellaneous
	"		1	insulator fragment, ceramic, fence type
	"		1	iron grub hoe blade (2 pcs.)
	"	Y	3	glass fragments, window
	"	Y	4	hollowware glass, jar fragments
	"	Y	2	wire nails
	"	Y	3	roof slate fragments
	"	Y	1	anthracite coal fragment
	"		1	quartz flake fragment
	"		4	quartz, thermally altered fragments, conjoining

Locus II: Wingwall/Stone Barn Site (7NC-A-81)

II-1	0-30	Y	1	two-tined pitch fork head, fragment
	"	Y	1	iron plow share, modern
	"	Y	1	lightning rod, ground strap, toothed (3 pcs)
	"	Y	1	cultivator shovel
	"	Y	1	cap screw (5/8 x 1-1/4, hex-head)
	"	Y	1	lug wrench
	"	Y	1	shovel blade, early form
	"	Y	1	water pump (?) fragment, cast iron
	"		1	Lincoln cent, 1975
	"		1	redware, manganese oxide/lead glaze
	"		1	whiteware, underglaze decoration
	"	Y	1	glass, hollowware green
	"	Y	2	cut nails
	"	Y	1	brick fragment
	"	Y	1	mortar, thermally altered sample
	"	Y	1	bone fragment, poultry

Locus III: Thompson House (7NC-A-82)

III-1	0-24		1	late prehistoric sherd, incised decoration
	"		1	Newark jasper, thinning flake
	"		2	quartz red fragments
	"		1	late prehistoric sherd, fabric impressed, quartz temper
	"		1	late prehistoric sherd, fabric impressed
	"		1	quartz core tool fragment
	"		2	quartz flake fragments mineral
	"		2	quartz flake fragments
	"		2	quartz, thermally altered
	"		3	quartz/schist fragments

<u>Unit</u> <u>No.</u>	<u>Depth</u> <u>(cm.)</u>	<u>Culled</u>	<u>f</u>	<u>Item</u>
III-1	0-24		1	undecorated porcelain
	"		3	glazed whiteware
	"		1	redware fragment unglazed
	"		1	hollowware glass, green beverage
	"	Y	1	corrugated fastener (jew nail)
	"	Y	1	wire nail

-- End of List --